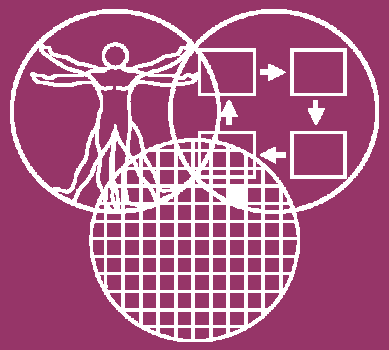

NewPoint Group®
Management Consultants

California Department of Pesticide Regulation

Virtual Service Delivery Environment

Business Process Improvement Opportunities and E-Government Candidates

Volume I – Process Reviews and Recommendations

March 30, 2001

Table of Contents

Executive Summary

- The California Department of Pesticide Regulation (DPR) was formed in 1991 with establishment of the California Environmental Protection Agency (CalEPA). The DPR regulates all aspects of pesticide sales and use, recognizing the need to control pests, while protecting public health and the environment and fostering reduced-risk pest management strategies. The DPR has expertise and resources to conduct environmental and human exposure studies, evaluate data, and assess and mitigate risk.

- The purpose of this review was to develop recommendations to improve department business processes, including moving five selected processes to the Web and providing a virtual service delivery environment. This new environment would allow the DPR to put enterprise data, applications, and processes at the fingertips of Web-enabled employees and external stakeholders.

- The process improvement recommendations are designed to prepare the DPR for a virtual service delivery environment that supports efficient and effective online interaction with stakeholders. The primary reason for focusing first on business process improvement is to simplify and integrate each process in preparation of the next step, enabling it with technology.

- The consulting team then identified candidates for providing services and information via the Internet. These "e-government" candidates would enable the improved business processes to further enhance the quality, timeliness, and cost-effectiveness of serving DPR stakeholders.

- This report presents the consulting team's assessment of five business processes and recommendations to improve each one. We do not prioritize these recommendations, develop an e-government strategy or vision, develop the business model for a virtual service delivery environment, nor present an implementation strategy or plan. These important activities will be completed in later project tasks and presented under separate cover.

Background

- The California Department of Pesticide Regulation (DPR) was formed in 1991 with establishment of the California Environmental Protection Agency (Cal/EPA). The DPR regulates all aspects of pesticide sales and use, recognizing the need to control pests, while protecting public health and the environment and fostering reduced-risk pest management strategies. The DPR has expertise and resources to conduct environmental and human exposure studies, evaluate data, and assess and mitigate risk.

- The 55 county agricultural commissioners (CACs) enforce pesticide laws at the local level, including certifying and licensing private applicators, issuing permits for restricted pesticides, capturing reports of all pesticide use, conducting inspections, investigating claims, and initiating enforcement actions. Key partnerships between the DPR and CACs are essential for carrying out assigned responsibilities and serving stakeholders.

- The DPR understands the significant benefits to both the department and its constituents of conducting business over the Internet, and recognizes the opportunities of providing a relevant, attractive, and convenient total experience to its stakeholders through Web-enabled business processes.

- The DPR also recognizes that moving business processes to the Internet will require changes to:
  - Established management cultures
  - Established alliances with major stakeholders
  - Existing business processes
  - Existing technology architectures.

Background *(continued)*

- The DPR directed the consulting team's evaluation to the following five business processes:
  - Pesticide registration
  - Licensing and certification
  - Permitting and enforcement
  - Pesticide use report
  - Mill assessment.

- For each process, we examined current activities, products, performance, and alignment with strategic goals. Based upon extensive interviews and facilitated sessions, we developed suggested solutions to improve current business processes, identified potential candidates for delivering information and services on the Internet, and determined needed improvements to back office applications and databases. This work did not include a detailed analysis of every activity, an assessment of each activity's value to customers (i.e., a value-added analysis), a detailed assessment of resources consumed by each process, nor a detailed assessment of who funds and who benefits from each process.

- Two prior reports delivered to the DPR are companions to this business process improvement and e-government candidates report:
  - In a January 2001 report, titled *Virtual Service Delivery Environment - Readiness Assessment*, we presented the readiness of the DPR to transition to a virtual service delivery environment. That report addresses a number of broad issues, including the need for the DPR to institutionalize project management, improve communication and knowledge sharing, create a learning organization, and improve information technology effectiveness.
  - In a March 2001 draft report, titled *Virtual Service Delivery Environment - Information Technology Assessment*, we presented an assessment of the department's information technology environment. That report assesses the readiness and capability of the department to undertake significant business initiatives that require IT support to succeed. Based on that review, we believe that it is very risky for the DPR to create additional IT support requirements at this time. The report contains a number of suggested solutions to strengthen the management, staffing, and delivery of IT support to the DPR so that it can.

Recommendations

- In this report, we present recommendations for each of the five business processes. For each of the five processes, we present the following:
  - **Process improvements**: these recommendations are designed to align the processes to better meet customer requirements, to reduce cycle times, and to improve the quality, availability, effectiveness, and cost of business processes within the DPR. These recommendations can meet most of the stakeholder needs we identified during this project for reducing turnaround times and increasing the quality of DPR products, without any Internet-enablement. In other words, they can be less expensive to implement and bring more immediate benefits than the e-government solutions.
  - **E-government candidates**: these are potential solutions to improve delivery of both information and services to external stakeholders, as well as to simplify the operational demands on DPR employees. Electronic government can improve the business of government by creating a more efficient and convenient interaction with the DPR. Based upon a statewide survey of businesses being conducted by the Department of General Services and the University of California, Los Angeles, the highest priorities that businesses would like on the State's portal are: (1) basic information search and retrieval, and (2) application and renewal of licenses. Both these business needs are among those addressed by the e-government candidates presented in this report.
  - **Information technology improvements**: these represent baseline upgrades and modifications to back office applications and databases that currently support the five business processes.
- A summary of these recommendations is presented on the following five pages. A description of each recommendation is provided in Section II of this report, at the end of the discussion of each business process. Justification for the recommendations is provided in the gap analyses presented in **Appendix B** of this report (appendices are presented under separate cover).

Executive Summary

Process Improvement Recommendations

P1. Eliminate scientific data evaluations that are beyond the scope of the scientific discipline

P2. Ask the U.S. EPA and the registrant to provide a copy of every completed U.S. EPA data evaluation report, and eliminate data evaluations already completed by the U.S. EPA

P3. Increase the number of requests to the U.S. EPA to expedite minor product label changes identified by the DPR during the registration process

P4. Expand the number of products that, under specified conditions, can be registered without evaluation of scientific data

P5. Post the 30-day public notice earlier in process (at the time a submission enters evaluation)

P6. Form a workgroup and determine which internationally adopted templates that the DPR will adopt for submission of data

P7. Ask the U.S. EPA and the registrant to provide a copy of every completed U.S. EPA efficacy data evaluation report for antimicrobial products being reviewed by the DPR

P8. Provide to the registrant any DPR product as soon as it is being used for DPR decision making

P9. Organize and charter a team to identify process and database changes necessary to capture the actual time spent on evaluating submissions and improve existing performance measures

P10. Provide more specific written instructions and workshops to the regulated community

P11. Complete current efforts to evaluate the benefits, organization, and required system modifications of a consolidated screening function

P12. Obtain a legal opinion to determine which public reports must be prepared and when a registration work product becomes a public record

P13. Link documents by the industry standard already in use at DPR: the chemical code

P14. Extend registration period from one year to two years

P15. Eliminate any licensing renewal activity that does not add value to the registrant

P16. Confirm and publish the basis for selecting the next submission that is waiting to be processed

P17. Establish and publish the DPR's goal for the number of days to process a submission

P18. Eliminate registration tracking systems now used by the Medical Toxicology Branch and the Worker Health and Safety Branch

P19. Identify primary data corruption issues and root causes of product label database data errors, then develop and implement a plan to address the highest priority issues

P20. Evaluate late fees to make commensurate with impact on the DPR (increased staff time, lost mill assessments)

P21. Other improvements (described in report)

E-Government Candidates

EG1. Prove concept of submitting and processing a product label electronically

EG2. Prove concept of submitting and processing the entire registration submission

EG3. Provide Internet access to materials that will help registrants through all aspects of registering products

EG4. Allow registrants to complete and submit a product registration application form online

EG5. Provide secure Web access to pesticide registration reports

EG6. Provide Internet access to pesticide index and chemical information databases

EG7. Allow registrants to renew product licenses on the Internet

EG8. Develop the capability to display the image of the current product license on DPR's external website

EG9. Develop and post on DPR's website statistics on, and causes for, incomplete applications that are returned to registrants

EG10. Other candidates (described in report)

Information Technology Improvement Recommendations

IT1. Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to upgrade databases that support registration from Oracle 7.3.4 to Oracle 8 and to make other identified improvements

IT2. Obtain an electronic copy of U.S. EPA's list of pests and populate the DPR product label database with this list, for those registered products with matching U.S. EPA registration number

IT3. Make modifications to the registrant/firm and the licensing/renewal databases to support staff research and license renewal efforts

IT4. Other improvements (described in report)

Licensing and Certification Process Recommendations

Process Improvement Recommendations

P1. Determine whether assigning staff to all license types is more efficient than assigning staff to one license type

P2. Stagger license and certificate renewals throughout the year

P3. Extend the current license and certificate renewal period from two years to three years

P4. Replace the old license and certificate card embosser with a new embosser already purchased by the DPR

P5. Use existing performance measures with more precise cycle time definitions and data captured by the core database

P6. Evaluate alternative sources to proctor licensing and certificate examinations

P7. Replace the old Scantron machine with a new Scantron machine already purchased by the DPR

P8. Provide licensing and certification staff with specific training to improve customer service

P9. Develop and implement a plan (tasks, resources, schedule, and responsibilities) to update applications and forms

P10. Update examinations and study guides to reflect current pesticide practices

P11. Periodically compare license and certificate holder violations with examination results and continuous education courses taken

P12. Other improvements (described in report)

E-Government Candidates

EG1. Allow license and certificate holders to renew licenses and certificates on the Internet

EG2. Allow users to complete and submit continuing education sponsorship requests on the Internet

EG3. Allow applicants to complete and submit a license and certificate application form on the Internet

EG4. Evaluate whether to allow applicants to take licensing and certification examinations on the Internet

EG5. Evaluate whether to develop remote kiosks that applicants can use to take licensing and certification examinations

EG6. Improve stakeholder access to study guides and materials (including text books) needed for examinations

EG7. Provide Internet access to materials that will help stakeholders through all aspects of licensing and certification

EG8. Provide Intranet access to materials that will help DPR provide stakeholders with improved customer service, including online access to improved listing of licensees and certificate holders

EG9. Evaluate bar coding licenses and certificates for greater access to current licensing and certification information

EG10. Other candidates (described in report)

Information Technology Improvement Recommendations

IT1. Correct documented problems with the licensing and certification core database

IT2. Prepare system and user documentation of applications and databases

IT3. Use the core database and the statistics databases to capture permit reform act cycle time data and prepare required reports

IT4. Create the capability to automatically print various letters from existing licensing and certification databases

IT5. Other improvements (described in report)

Permitting and Enforcement Process Recommendations

Process Improvement Recommendations

P1. Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to implement the *Enforcement Initiative*

P2. Evaluate whether to create an enforcement group within enforcement to conduct independent effectiveness evaluations of all CACs, rather than have regional office staff evaluate CACs in their region

P3. Evaluate whether to develop a formula for allocating the mill to CACs that is more closely tied to performance

P4. Adopt performance measures for the permitting and enforcement process

P5. Develop standards for managing investigation cases

P6. Develop a method for identifying a DPR versus a CAC investigation

P7. Manage expectations of stakeholder on investigation status and information

P8. Provide regional office staff more decision-making authority on enforcement actions

P9. Reinforce safety in investigation work

P10. Eliminate review of CAC notice of proposed actions (NOPAs)

P11. Consider eliminating state funded product compliance program activities

P12. Evaluate whether DPR staff should continue to write general permit conditions for non-enforcement or non-CEQA issues

P13. Increase the mill charged to registrants who necessitate the DPR writing general permit conditions for non-enforcement or non-CEQA issues

P14. Develop and adopt a standard, department-wide name, format, and numbering sequence for all policy letters

P15. Evaluate whether to update the existing enforcement policy and procedures manual to reflect current DPR policies

P16. Improve the quality and presentation of training and outreach materials

P17. Compare CDFA laboratory fees with fees of other companies providing the same services

P18. Other improvements (described in report)

E-Government Candidates

EG1. Allow CACs to submit regulatory activities summary reports electronically

EG2. Use hand held electronic devices to record market surveillance program data in the field

EG3. Use hand held electronic devices for the product compliance program

EG4. Provide greater Internet access to, and search capability for, enforcement letters

EG5. Provide Internet access to relevant enforcement documents and materials

EG6. Provide Internet access to answers that stakeholders often ask

EG7. Provide CACs an online forum to share information on administrative civil penalty cases

EG8. Provide CACs secure Internet access to notices of final decision (NOFDs)

EG9. Provide Internet access to pesticide residue data

EG10. Other candidates (described in report)

Information Technology Improvement Recommendations

IT1. Improve capabilities of the enforcement and compliance action tracking database

IT2. Allow regional office field staff to either submit electronic data, or populate the product compliance database and the residue databases directly, rather than providing hard copies to headquarters for data entry

IT3. Other improvements (described in report)

Pesticide Use Report Process Recommendations

Process Improvement Recommendations

P1. Maximize the number of required validation checks of PUR data within any application used by a county to capture use reports

P2. Modify county contracts to require that counties submit all PUR data received during the prior month within 20 days (or a "reasonable time frame") of the end of the prior month

P3. Eliminate reporting of non-agricultural (structural) pesticides

P4. Provide more specific written instructions and workshops to pesticide users and counties

P5. Formalize a process to allow individuals to report possible errors in PUR data and track the resolution of these reports

P6. Formalize an on-going effort to utilize mill assessment, product label, and PUR information to determine potential pesticide use that goes unreported

P7. Review GIS developers' group recommendations for identifying field sites and incorporate required modifications into regulations

P8. Strengthen the relationship with the University of California Statewide Integrated Pest Management Project, including more frequent updates of PUR data throughout the year

P9. Assign a single position the authority and responsibility for PUR transaction and reporting functions

P10. Place all Division of Enforcement, Environmental Monitoring, and Licensing IT positions under direct supervision of a single information technology position

P11. Determine and then commit to a specified level of DataFlex support

P12. Evaluate the feasibility of deploying a county-developed permitting and use reporting system to all counties

P13. Evaluate the feasibility of deploying the Kern County GIS application to all counties

P14. Determine which work groups to form and retain, then prioritize existing issues and recommendations to improve PUR process and data

P15. Develop performance measures for the PUR process

P16. Other improvements (described in report)

E-Government Candidates

EG1. Provide Web-enabled access to electronic filing of use report data

EG2. Provide a means for end users to query the PUR database locally, using the same tools as will be provided with the Internet-based pesticide resource directory

EG3. Provide a daily extract of the product label database on DPR's website for downloading by counties

EG4. Other candidates (described in report)

Information Technology Improvement Recommendations

IT1. Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to upgrade PUR applications and database from Oracle 7.3.4 to Oracle 8 and to make other identified improvements

IT2. Determine desired enhancements to a county-pilot for use reporting

IT3. Prepare system and user documentation of all applications and the database

IT4. Provide a means to track ground water sites in order to be in compliance with new state law

IT5. Other improvements (described in report)

Mill Assessment Process Recommendations

Process Improvement Recommendations

P1. Provide additional instructions to the mill form

P2. Develop a user's guide for how to use the mill assessment software application and database

P3. Ensure that the database of currently registered products is up-to-date and clarify the definition for when a registered product becomes unregistered for failure to renew

P4. Consider providing incentives for submitting M*ill Assessment Quarterly Report* forms prior to their due date to discourage concentration of returns mailed at deadline

P5. Determine whether the DPR should more aggressively pursue complaints against those failing to comply with mill requirements

P6. Modify the current 10 percent late penalty charged to registrants, dealers, and brokers so that the size of the penalty increases with time

P7. Develop a process and toll-free number that allows an individual to contact the DPR with anonymous tips on registrants, dealers, or brokers who may not be paying the mill

P8. Establish and publish the DPR's performance measures for the mill assessment process

P9. Formalize an on-going effort to utilize mill assessment and pesticide use information to determine potential mill assessments that go unpaid

P10. Develop and document a methodology for sampling companies to audit for mill assessment payments

P11. Create a process to reconcile mill amounts recorded by accounting with mill amounts entered in the mill assessment database

P12. Collect the mill assessment twice per year rather than quarterly

P13. Reorganize mill assessment staff

P14. Follow-up with three progressively more stringent letters to all registrants, dealers, and brokers with a mill payment compliance problem

P15. Prepare a mill assessment status report on a biannual basis to keep the DPR aware of sales data, audit findings, and other management information

P16. Other improvements (described in report)

E-Government Candidates

EG1. Allow registrants, dealers, and brokers to submit a complete *Mill Assessment Quarterly Report* form

EG2. Provide Internet access to materials that will help registrants, dealers, and brokers through all aspects of completing the *Mill Assessment Quarterly Report* form

EG3. Provide online access to answers that stakeholders often ask

EG4. Provide Internet access and query capabilities to pounds sold data

Information Technology Improvement Recommendations

IT1. Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to improve the mill assessment database

IT2. Use one database of current registrants and one database of current dealers and brokers for mailing addresses

IT3. Other improvements (described in report)

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I. Background

A. Introduction

- The California Department of Pesticide Regulation (DPR) was formed in 1991 with establishment of the California Environmental Protection Agency (Cal/EPA). The DPR regulates all aspects of pesticide sales and use, recognizing the need to control pests, while protecting public health and the environment and fostering reduced-risk pest management strategies. The DPR has expertise and resources to conduct environmental and human exposure studies, evaluate data, and assess and mitigate risk.

- The 55 county agricultural commissioners (CACs) enforce pesticide laws at the local level, including certifying and licensing private applicators, issuing permits for restricted pesticides, capturing reports of all pesticide use, conducting inspections, investigating claims, and initiating enforcement actions. Key partnerships between the DPR and CACs are essential for carrying out assigned responsibilities and serving stakeholders.

- Issues of concern to the department include:
  - Needs exist to review processes and identify improvements in order to prepare for transition to a virtual service delivery environment.
  - Timeframes to register products and issue and renew various licenses are long.
  - Many key activities rely on hardcopy documents and files that are maintained at multiple locations throughout the state in DPR regional and CAC offices, causing delays and increasing staff time.
  - Information shared must be clear, concise, timely, useful, cost-effective, and secure in order to provide value to stakeholders.
  - Users cannot easily access, search, or summarize information in areas considered critical by stakeholders: registration and pesticide usage, which restricts access to public information. In many cases, the department relies on inefficient, manual distribution and hardcopy correspondence to provide this information, unnecessarily consuming staff resources and under-serving stakeholders.
  - No end-customer DPR services and transactions take place over the Internet.[1] A full transaction includes payment to DPR for the application or service.

[1] The State of California has just two processes that are fully enabled on the Internet, vehicle registration and registered nurse license renewal.

A. Introduction *(continued)*

- Success of e-government initiatives will depend on several external factors, including:
  - Demand by DPR stakeholders for the service delivery model
  - Clearly defined roles/responsibilities of other regulatory and enforcement agencies
  - Computer literacy of DPR stakeholders
  - Technology infrastructure capabilities of DPR regional and CAC offices
  - Standardization of information formats and tracking systems "owned" by stakeholders.

- The DPR understands the significant benefits to both the department and its constituents of conducting business over the Internet, and recognizes the opportunities of providing a relevant, attractive, and convenient total experience to its stakeholders through Web-enabled business processes.

- The DPR recognizes that delivering information and services online is a program initiative, not a technology initiative, and that process improvements can result in more efficient and effective services to the public. The DPR is focusing first on business process improvements that can simplify and integrate each process in preparation of the next step, enabling it with technology. This view also supports the need to assign program staff, not IT personnel, to lead e-government initiatives.

- The DPR also recognizes that moving business processes to the Internet will require changes to:
  - Established management cultures
  - Established alliances with major stakeholders
  - Existing business processes
  - Existing technology architectures.

B. Scope

- The purpose of this review was to develop recommendations to improve five selected business processes, including moving selected business processes to the Web, providing a virtual service delivery environment. This new environment will allow the DPR to put enterprise data, applications, and processes at the fingertips of Web-enabled employees and external stakeholders.

- The process improvement recommendations are designed to prepare the DPR for a virtual service delivery environment that supports efficient and effective online interaction with stakeholders. The primary reason for focusing first on business process improvement is to simplify and integrate each process in preparation of a final step, enabling it with technology. This approach is consistent with the Legislative Analyst's Office recommendations to the Legislature (January 24, 2001) regarding e-government proposals.

- The consulting team also identified candidates for providing services and information via the Internet. These "e-government" candidates would enable the improved business processes to further enhance the quality, timeliness, and cost-effectiveness of serving DPR stakeholders. This approach is consistent with the Governor's "My California" portal initiative, as well as with the Administration's business process reengineering effort at 20 State agencies.

- For each process, we examined current activities, products, performance, and alignment with strategic goals. This work did not include a detailed analysis of every activity, an assessment of each activity's value to customers (i.e., a value-added analysis), a detailed assessment of resources consumed by each process, nor a detailed assessment of who funds and who benefits from each process.

DPR Business Processes Evaluated

Pesticide Registration
Licensing and Certification
Permitting and Enforcement
Pesticide Use Report
Mill Assessment

B. Scope *(continued)*

- This report presents the consulting team's assessment of five business processes and recommendations to improve each one. We do not prioritize these recommendations, develop an e-government strategy or vision, develop the business model for a virtual service delivery environment, nor present an implementation strategy or plan. These important activities will be completed in later project tasks and presented under separate cover.
- The consulting team developed several improvement opportunities that would support all five business processes. These are presented as "department-wide" improvements.

Prior Reports from Consulting Team

Government Information Portals and Service Delivery Websites: Leading Practices (November 2000)
Virtual Service Delivery Environment: Readiness Assessment (January 2001)
Quick Returns, Version 1 (January 2001)
Virtual Service Delivery Environment: Information Technology Assessment (March 2001)
Quick Returns, Version 2 (March 2001)

C. Approach

- We conducted individual interviews with approximately 15 DPR employees to develop an overview of services, products, operations, and technology support.

C. Approach *(continued)*

- For each of the five business processes, we held several facilitated sessions with from 6 to 12 staff considered by the DPR to be subject matter experts. The purpose of the sessions were to:
  - Define the business process and document workflows
  - Identify strengths, weaknesses, and potential process improvement opportunities
  - Identify candidates for delivering information and services via the Internet and Intranet (e-government).

- We then prepared documents describing processes, workflows, strengths, process improvements, information technology improvements, and e-government candidates, and provided these documents to each facilitated session participant to review and provide comments. We incorporated all comments received back into the process documentation. The results of this participant feedback provide a basis for the findings and recommendations in this report.

- We prepared structured interview guides and then interviewed 29 external stakeholders. A list of stakeholders contacted is presented in **Appendix A** of this report. Several registrants prepared responses to the interview guide and submitted them to the Consumer Specialty Products Association (listed in Appendix A). The CSPA then forwarded these comments, unedited, to our project team, without revealing the registrant's name. While stakeholders' expertise was required for us to complete this project, the findings and recommendations are those of the consulting team.

Objectives of Stakeholder Interviews

Assess stakeholder information and service needs
Identify county-developed solutions that could be leveraged statewide by the DPR
Determine types of structured and unstructured data shared with the DPR
Identify suggestions for strategic and tactical process improvements
Identify gaps between stakeholder needs and current DPR processes
Identify potential candidates for DPR to deliver services and information via the Internet

D. E-Government Definitions and Benefits

Definition

The provision of services and information by state government to the public through the Internet, integrated Internet based technologies, and voice and data technologies dependent on the Internet. (Source: *Executive Order D-17-00*, Governor Gray Davis).

The ability of government to interact with citizens, businesses, and other government entities may be in the form of obtaining information, filing applications, providing documents with a filing, or making payments. A goal is to provide services and information in a way that makes sense to constituents and is easy to use (fewest mouse clicks).

Benefits

There are no definitive studies or data detailing the costs and benefits of e-government solutions. General benefits from the technology will differ for each constituent served:

1. *Regulated community*: reduced response times, reduced application and filing times, access anytime/anywhere, and increased ease of doing business
2. *General public*: easier and greater access to public information, access anytime/anywhere, and easier downloading of forms and transacting business with government
3. *State agencies*: better service to the public, easier information sharing, reduced staff time spent processing paperwork, and reduced cash float
4. *State government*: elimination of department barriers, creation of a single face of government, and widespread access to public information.

Components[1]

1. Points of access (e.g., Web, kiosk, telephony)
2. Software applications (e.g., registration application, license renewal)
3. Software components (e.g., e-forms, search capabilities, workflow, payment engine, . . .)
4. System infrastructure (e.g., message brokering, audit and logging, session management, . . .)

[1] Source: ezGov, Realizing e-Government, Government Technology magazine.

II. Business Process Reviews

- This section of the report presents the consulting team's assessment of five business processes and recommendations to improve each one:
  - Pesticide registration
  - Licensing and certification
  - Permitting and enforcement
  - Pesticide use report
  - Mill assessment.

- For each of the five business processes evaluated, the consulting team's findings and recommendations are organized as follows:
  1. Process description
  2. Recent and planned improvement initiatives
  3. Process overview
  4. Process workflow
  5. Metrics
  6. Stakeholder information and service needs
  7. Strengths
  8. Internet access to process
  9. Process improvement recommendations
  10. E-Government candidates
  11. Information technology improvement recommendations.

- A "gap analysis" for each process is presented in **Appendix B** to this report (under separate cover). The analysis presents observations and descriptions about the current performance of each process, as well as opportunities to improve current performance.

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Pesticide Registration Process

Process Description

- Before a pesticide may be sold and used in California, it first must be registered with the DPR. Before registering a pesticide, the DPR conducts a thorough evaluation to determine whether the pesticide endangers human health or the environment and is effective for its intended use.

- Applicants seeking registration must submit scientific data to support the pesticide's chemistry and toxicology, potential risks posed to worker health and safety, potential effects on the environment, and effectiveness for its intended uses. Applicants must provide a copy of the U.S. EPA (Environmental Protection Agency) approved label and letter (unless exempted from U.S. EPA registration).

- Applicants must submit, and the DPR must review and approve, any changes to the product's label before the product bearing the amended label can be sold or used in California.

- Department scientists within various disciplines evaluate the data submitted and issue an "evaluation report" to either support or not support registration. A program supervisor reviews these reports and proposes a decision to either register or deny. The DPR then provides a 30-day period for public comment on their decision. For products proposed for registration the DPR then approves the label, registers the product, and issues a certificate of registration (license) to the registrant. For products proposed for denial, if the applicant provides the required additional data, the DPR will evaluate it, otherwise, the DPR will deny registration.

- After a product is registered, it is subject to an annual renewal fee and a quarterly mill assessment. Registered products also are subject to re-evaluation, risk assessment, and data call-ins.

- A DPR registration specialist assigned to a company is responsible for processing all registration applications ("submissions") from that company.

2. Recent and Planned Improvement Initiatives

Recent Improvements

- Since 1999, the DPR recruited 25 new staff to fill vacancies and newly authorized positions in the Registration Branch. Since then, the DPR has reduced the backlog of submissions by more than 50 percent and average time spent at three workstations by as much as 50 percent.
- On September 7, 1993, the DPR began accepting submissions for several types of products prior to U.S. EPA registration ("concurrent registrations"). The goal was to reduce the time between federal and state registration of a product.
- The DPR obtained approval for new regulations that exempt certain minimum risk pesticide products from being registered in California.
- The DPR provided internal staff and external stakeholders online access to the registration desk manual and other process related documents.
- The DPR provided internal staff with Intranet-access to additional reports and enhanced access to the automated tracking system.
- The DPR upgraded the registration tracking system to allow additional data table and record editing features in Cold Fusion. Cold Fusion is an application development tool that the DPR uses to write Web pages that interact with databases.

Planned Improvements

- A business process group, made up of DPR and registrant representatives, met four times in 2000 and identified eight recommendations to improve the registration process (refer to **Appendix C** of this report). These suggestions, which have not yet been fully developed, range from providing evaluation reports on a secure, internal website to electronic submission of the entire application and data studies. The BPG has prioritized these suggestions as short-term and long term. No formal project plan exists.

- The DPR has short-term plans to notify registrants via e-mail each time an evaluation workstation (e.g., medical toxicology) completes its evaluation, noting the decision made and the number of days spent at that workstation. This project is waiting for an Oracle/Perl programming resource.

- The DPR has longer term plans to provide secure, website access to evaluation reports, including keyword search, database query and retrieval, and download capabilities. The DPR has completed the first step critical for efficient Web-based publishing and retrieval of these reports: naming conventions and a storage design. Efforts are underway to define the methodology to link these reports to the registration tracking system. No other formal project plans exist.

- The DPR will upgrade Cold Fusion query capabilities to the tracking system to provide additional management reports for statistical analysis. These reports are currently being completed by Registration programming staff.

Planned Improvements *(continued)*

- The DPR has proposed to implement the following improvements, but has not yet secured funding:

  - Image the approximately 15 million pages of scientific data (162,000 studies) and DPR-generated scientific reviews (evaluation reports) to allow for Web-based access via the pesticide data index, product/label, and registration tracking databases.

  - Pilot electronic registration submissions to test the standards and requirements for submitting, receiving, reviewing, processing, and archiving applications, data studies, product labels, and fees.

- The following project is being completed within existing budget and staffing constraints :

  - Upgrade and provide Internet access to the pesticide data index. This database was created in 1984 and contains a detailed index to approximately 162,000 studies contained in 55,000 volumes in support of product registrations. Among the many data elements captured in this database for each data study are the study's title, data owner, test type, chemical code, DPR's unique identifier, and U.S. EPA's unique identifier. This mission critical database is widely used internally and externally (responding to public information requests), but is decaying because of the design and maintenance interface.

    The DPR is about half way through a redesign of this pesticide data index to meet current needs and to migrate from Oracle Forms (a client/server application development system) to Oracle and Cold Fusion (a Web-based application development environment). The DPR has consolidated the chemical information database, and currently is writing the data manipulation scripts to populate the new table structures. Enhancements will include Web-based access for internal staff, followed by public access. This will require that DPR load Cold Fusion on the external Web server, and upgrade server capacity to accommodate the pesticide data index.

3. Process Overview

Inputs

- Product registration application, product information, product label, scientific data, and fee ("submission"). Includes label amendments
- Renewal application and fee (sometimes with status of conditional registration)
- Research authorization application
- Information requests via letter, fax, telephone, or e-mail

Process

- Open and log receipt of mail
- Create tracking system entry to record submission processing history
- Create pesticide data index of data submitted in support of product registrations or data call-ins
- Review submission for completeness (includes comparing proposed label with approved U.S. EPA label). If deficient, return to registrant
- Review research authorization's proposed label and use
- Approve minor label amendments and non-substantive changes
- Direct submission to appropriate scientific disciplines, capturing recommendation and processing time information on each transaction
- At each appropriate scientific discipline, determine whether:
  - Required data are submitted
  - Submitted or referenced scientific data are acceptable and support registration
  - Additional testing is needed
  - Data supports the label "signal" word and precautionary statements, protective clothing statements, worker or public reentry intervals, environmental hazard statements, statement of practical treatment, pre-harvest intervals, use directions, and efficacy claims
  - Evidence of an adverse effect or a potential adverse effect exists
  - Potential hazards are mitigated by the label
- At each scientific discipline, prepare evaluation report. For new active ingredients, prioritize for risk assessment
- Sign-off on evaluation report(s)
- Post 30-day public notice to register or deny, and receive public comments
- Issue license or deny registration.

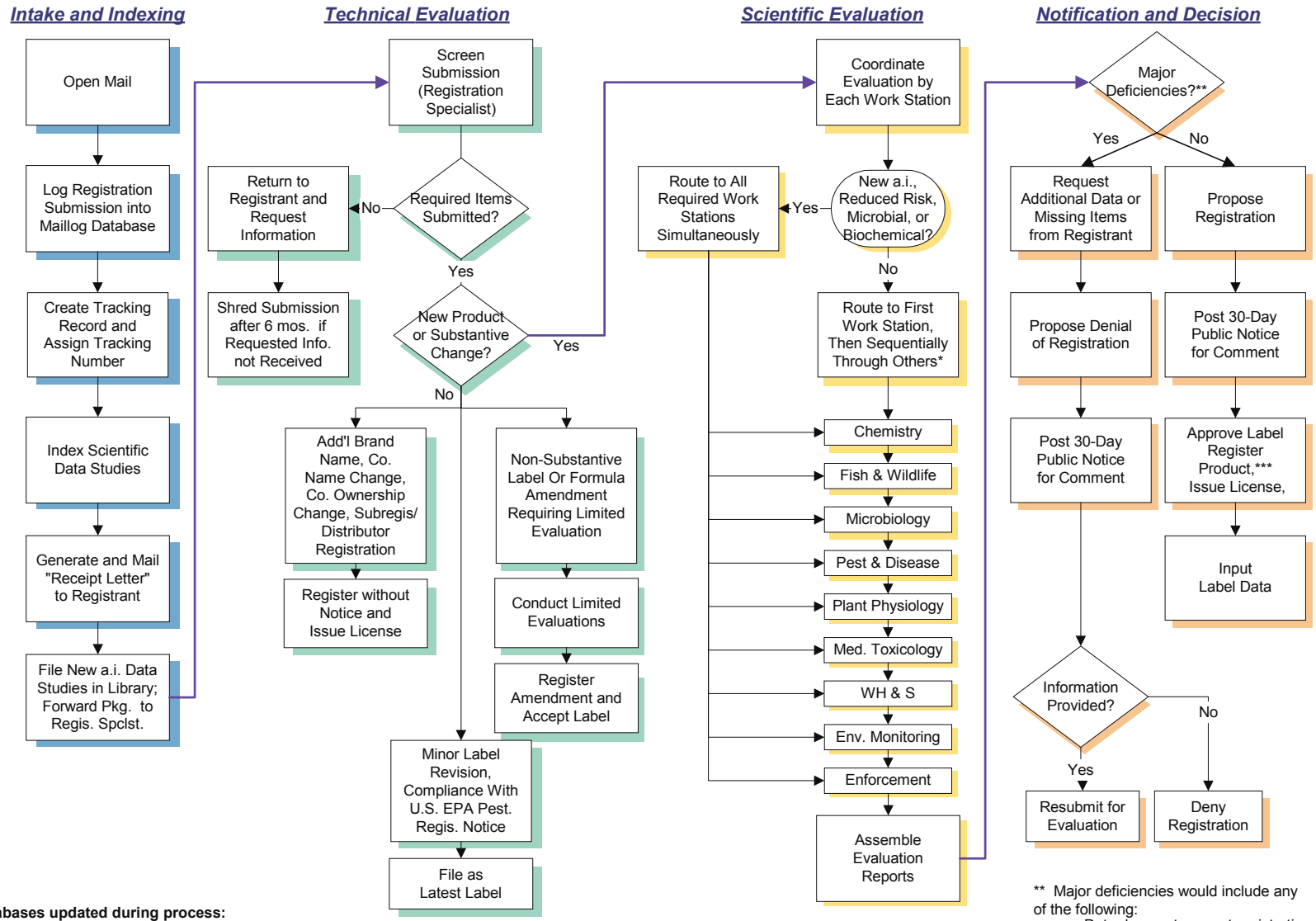
Performance Measures

- Median number of days it takes to process applications for: (1) new active ingredient registration, (2) new product registration, (3) renewal

Outputs

- Scientific evaluation reports
- List of materials entering evaluation
- Public notice of proposed decision
- Final decision - License or letter of denial
- California-approved product label
- Research authorization or denial
- Correspondence to registrants
- Updates to the following databases:
  - Mail log
  - Registration tracking
  - Master chemical ingredient
  - Pesticide data index
  - Data volumes circulation
  - Firm/registrant
  - Licensing/renewal
  - Product label
  - Research authorizations
  - Product file circulation
- Label Resource Center "Hot Line"

4. Process Workflow



Primary databases updated during process:

- Mail log
- Registration tracking
- Master chemical ingredient
- Pesticide data index
- Data volume circulation
- Firm/registrant
- Licensing and renewal
- Product label
- Research authorizations
- Product file circulation

* The first deficiency found during evaluation triggers a notice of deficiency letter to the registrant.

** Major deficiencies would include any of the following:

- Data does not support registration
- Label is not acceptable
- Hazards are not mitigated

*** If DPR proposes a conditional registration, registrant must agree, else DPR denies registration

5. Metrics

Workload

5,000 – 7,000	Submissions each year
30 – 40	Submissions each year processed concurrently with U.S. EPA (new active ingredients, reduced risk pesticides, microbials, and biochemicals)
4,200 – 6,300	DPR actions each year
1,000,000	Approximate number of pages of data indexed and archived each year

Calendar Year

Action Taken	1998	1999	2000
Final to Register	636	632	740
Final to Deny	96	84	149
Registration w/o Notice	1,133	1,285	1,454
Non-Substantive Change	779	535	610
File as Latest Label	788	701	1,123
Misc. Out	1,329	980	2,236
	4,761	4,217	6,312

Registered Products

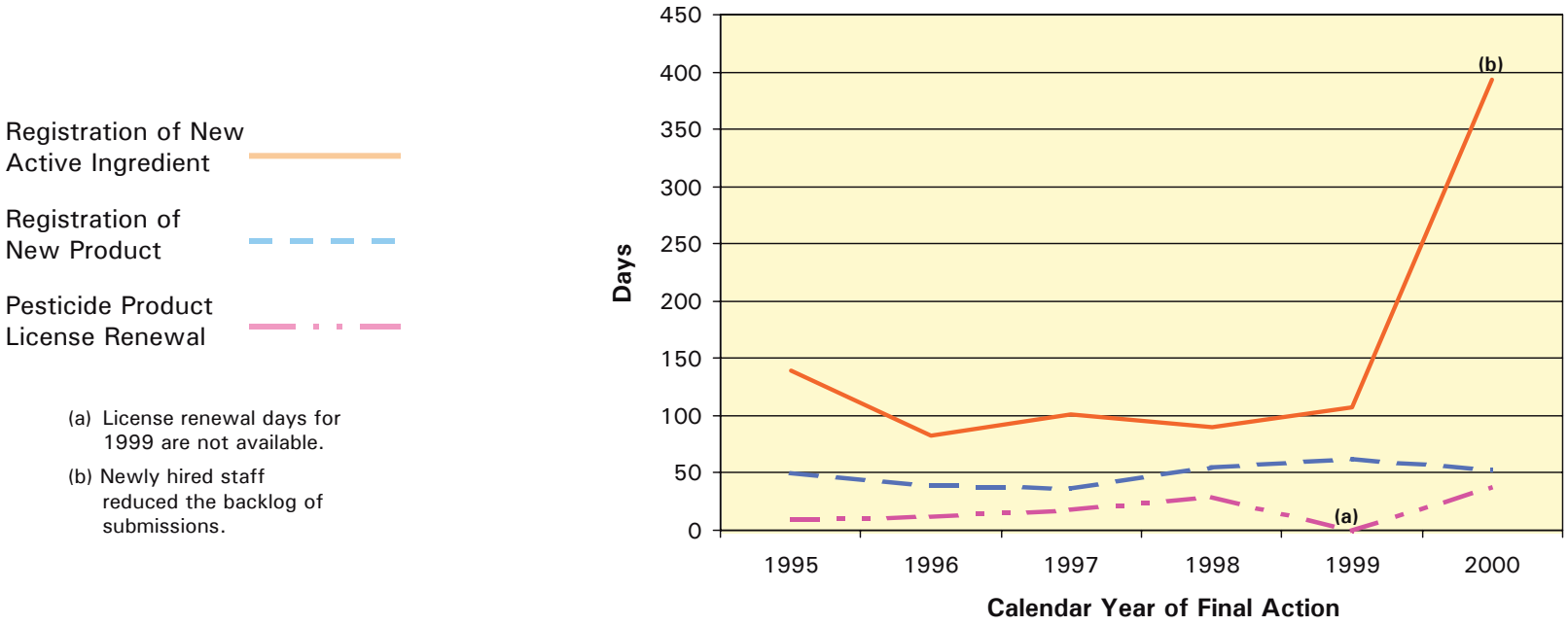
1,282	Firms with registered products
11,500	Registered products
65,000	Scientific data volumes
162,000	Scientific data studies
15,000,000	Pages of submitted data and DPR generated scientific reviews

Performance

Median Days to Register Product and Renew License

Calendar Year of Final Action

Action Taken	1995	1996	1997	1998	1999	2000
Registration of New Active Ingredient	139	82	101	90	107	393
Registration of New Product	51	39	37	55	63	53
Pesticide Product License Renewal	10	12	18	29	N/A	38



(a) License renewal days for 1999 are not available.

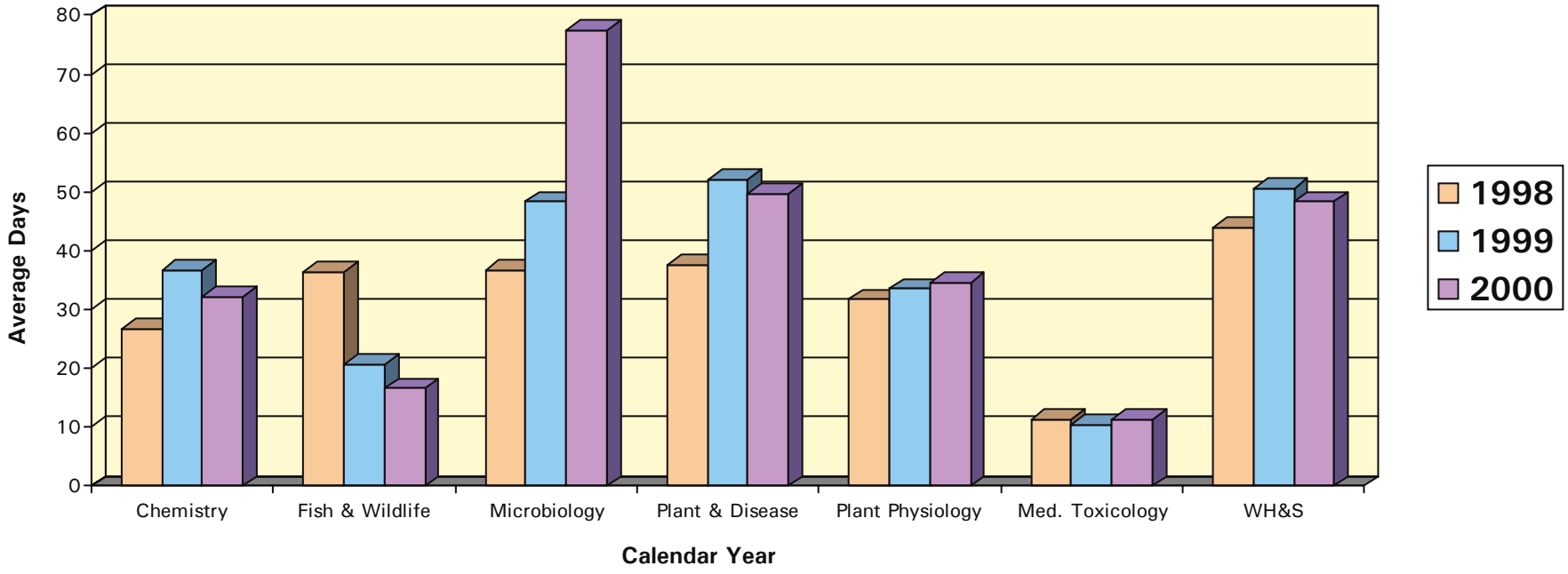
(b) Newly hired staff reduced the backlog of submissions.

Average Days In Evaluation Workstations*

* New products and label amendments (excludes new active ingredients)

Average Days

	1998	1999	2000
Chemistry	26.7	36.7	32.2
Fish & Wildlife	36.4	20.7	16.6
Microbiology	36.7	48.3	77.3
Plant & Disease	37.5	52.1	49.6
Plant Physiology	31.7	33.5	34.5
Med. Toxicology	11.2	10.4	11.3
WH&S	44.0	50.5	48.3



6. Stakeholder Information and Service Needs

Information Needs

- ❑ When the DPR will make its final decision (predictability)
- ❑ Registered product label (e.g., image of the the label registered by the DPR), including whether the product is a restricted material and why (verification)
- ❑ Knowing in what order submissions waiting at a workstation will be evaluated (transparency)
- ❑ Conditions of registration and any associated timing issues, such as deadlines for making changes and additional data requirements (timeliness)
- ❑ Secure access to evaluation reports as soon as they enter the DPR's decision making process (collaboration)
- ❑ Clearly written evaluation reports and cover letters (consistency)
- ❑ Current status of a submission: (1) at which workstation(s), (2) being processed or in queue, and (3) rank in queue
- ❑ How long a submission has been at a workstation
- ❑ When a workstation's evaluation of a submission will be completed
- ❑ How long each workstation takes to review submissions

Service Needs

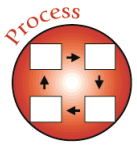
- ❑ Reduced time to register a product (efficiency)
- ❑ Earliest possible notification of all screening issues that are preventing a submission from entering evaluation (effectiveness)
- ❑ Earlier postings of 30-day public notices. This could be for the following submissions:
  - New product with new active ingredient (a.i.) already registered by U.S. EPA
  - New product with currently California registered a.i.
  - New product not California registered that is submitted by a distributor
  - Substantive label amendment already approved by U.S. EPA
  - Adjuvant for existing a.i.
  - Section 5 experimental use permit
  - Section 18 emergency exemption
  - Section 24 (c) special local need

7. Strengths

People

- Single registration specialist as point of contact for a registrant, making it much easier for the registrant to get advice and information than the alternative of contacting multiple staff. The DPR also benefits because the specialist's knowledge about the company, their unique needs and characteristics, and prior DPR decisions on similar company products can reduce the time required to conduct technical reviews.
- Generally low turnover within the technical and scientific disciplines, and staff with extensive knowledge of pesticides.
- An efficient team and clear instructions for conducting medical toxicology reviews, with evaluation reports that are considered high quality. Management has developed a filing structure and enforced naming conventions for medical toxicology evaluation reports to allow easy access to these reports and to reduce the time to research and leverage prior evaluations of an active ingredient.
- Recent use of team assignments (e.g., senior scientist, junior scientist, and a registration specialist) within the Registration Branch to increase throughput, training opportunities, and morale. One issue that this changes are intended to address is to reduce the time required for the DPR to make a final decision for those submissions with letters of authorization to use existing scientific data. A good review of existing data can eliminate time spent waiting in an evaluation queue and being evaluated by each scientific discipline.

Process



- A conditional registration process that registrants believe works well.
- Product label reviews that are more consistent and accurate than U.S. EPA label reviews. The DPR also makes requests to the manufacturer to obtain U.S. EPA approval for the correct label, which is a responsibility of the U.S. EPA.

7. Strengths *(continued)*

Process *(continued)*

- Willingness to divert resources and absorb the cost of performing work that the U.S. EPA is currently responsible for but unable to perform: residue tolerance testing of minor crops. This effort will reduce U.S. EPA's backlog, reduce the time required to register products, and demonstrate the ability of the two agencies to coordinate evaluation efforts and share work products.

- Automatic notification to hundreds of registrants and other interested parties at several milestones during registration:
  - To registrants: receipt of a submission, acceptance of minor label changes, licenses issued to registrants (distributors) of an identical registered product, proposal to register or deny, and product registration or denial
  - To interested parties: three reports to meet the requirements of CEQA – materials entering evaluation process, notices of proposed decisions, and final DPR decision (register or deny).

- Improved Registration Branch processes and technology architecture that support publishing, subscribing, and viewing content on the Intranet. These improvements have allowed the Branch to demonstrate how to simplify access to information using Web technologies.

Technology

- The leader among all states and the U.S. EPA in developing and providing Internet access to important pesticide databases, according to industry contacts. The DPR's website also is a good "clearinghouse" for related pesticide information, such as links to U.S. EPA's product label file.

- Internet access to product label information. External stakeholders find that DPR's product label data most often provides the information they need and at no charge. Although the national pesticide information retrieval system (administered by Purdue University) might be more detailed in some areas, users are charged to use the system.

Technology *(continued)*

- Extensive use of technology, including bar coding (incoming mail, data volumes, product files, and renewal forms), automatic tracking of registration transactions, and Intranet accessible databases. These technology solutions have reduced the time otherwise needed to track the large volumes of hardcopy materials received and generated each year, and provided useful management information that previously was difficult to obtain or not available. Any DPR staff can query the database and create pre-formatted reports, allowing efficient access to the data.

- Perhaps the best documented system (registration tracking) at the DPR, including delineation of the complex set of business rules that route a registration submission through DPR workstations.

- A portfolio of fifteen Oracle databases that are linked by common elements (e.g., chemical code), allowing complex querying of historical information. This platform is scaleable. In other words, it can be made to serve a larger number of users without breaking down or requiring major changes in procedures.

- Intranet access to nearly all of mission critical product registration information. Using a Web browser, staff can research and display extensive regulatory, scientific, and product information maintained by the DPR and other entities about every chemical registered by the DPR.

- A Worker Health and Safety Branch Intranet beta (test) site that allows an end-user to search for and obtain prior exposure assessments, field study reports, and epidemiology studies published since 1990. Although WH&S does not yet include evaluation reports on this site, the branch already has demonstrated the capability needed by the DPR to publish and retrieve documents, including registration evaluation reports. The platform takes advantage of at least 10 years of WH&S capturing data elements from every document (e.g., report title, report number, author, and date) in a database (now Oracle), consistent naming conventions for all reports, and a labor-intensive effort to convert hardcopy reports to a PDF format. (The portable document format allows documents created on one platform to be displayed and printed exactly the same on another no matter which fonts are installed in the computer.)

8. Internet Access to Process

Information Now Available on the Internet:

- Notices of proposed and final decisions (weekly)
- List of materials entering evaluation process (weekly)
- Product label database
- Chemical dictionary database
- Firm/registrant database (company name and address)
- Current Section 18 emergency exemptions
- Registration instructions and downloadable forms
- Registration desk manual, with links to related information such as codes and regulations

Services Now Available on the Internet:

- None

Links Provided to Other Sites:

- U.S. EPA registered products
- U.S. EPA chemical ingredients database
- U.S. EPA company information database

9. Process Improvement Recommendations

P1. Elimination of scientific data evaluations that are beyond the scope of the scientific discipline

Eliminate scientific data evaluations that are beyond the scope of the scientific discipline. The objectives are to reduce or eliminate resources spent on evaluation activities that are not within the scope of the particular scientific discipline and ensure uniform review and evaluation policies throughout the DPR. The DPR should strengthen process leadership and clarify evaluation guidelines to ensure uniform policies and procedures are defined and followed by all involved with pesticide registration. Each evaluation workstation should either develop new, or strengthen existing guidelines for conducting scientific reviews. These guidelines should clearly define the scope of evaluations, as well as clear criteria for determining the extent of the evaluation. (Worker Health and Safety has a three-page guideline for label reviewers that is one example of specific guidelines).

These guidelines also should include consistent policies and priorities among branches conducting registration evaluations in order to reduce or eliminate existing barriers that slow down the registration process. Appropriate branch personnel should clearly communicate these guidelines to every individual that conducts registration evaluations. Each branch then should enforce these guidelines. The Assistant Directors should take a hands-on approach to ensure guidelines in all branches are developed and followed.

P2. Sharing data evaluations and eliminating redundant evaluations

Ask the U.S. EPA and the registrant to provide a copy of every completed U.S. EPA data evaluation report, and eliminate data evaluations already completed by the U.S. EPA. The objectives are to reduce the time necessary to register a product and reduce the resources spent evaluating submissions. Formal efforts in 1994 by the DPR and the U.S. EPA to exchange work products and use resources more efficiently were promising in limited situations, but have since failed. It appears that the primary causes for the collapse were that the U.S EPA completed few of the data reviews, the U.S. EPA did not submit these in time to be useful to the DPR, and the DPR stopped asking for the reviews. Stronger leadership by both agencies could make this happen, benefiting the regulatory agencies and the regulated community. In the case of scientific concerns, the DPR cannot do much to improve a U.S. EPA evaluation that is poorly researched or written.

If the U.S. EPA and the DPR generally agree on criteria for evaluating data studies, and the U.S. EPA evaluations are thorough, then the benefits of the DPR reviewing the same data and reaching the same conclusions do not outweigh the time delays and cost. The DPR would review the U.S. EPA evaluation but not conduct a full evaluation of the same data.

P2. ***(continued)***

Registration specialists should ask registrants to provide U.S. EPA data evaluations with their California submissions. This request could be done earlier by asking registrants to inform the U.S. EPA of products that they intend to submit to California. The DPR should ask the U.S. EPA to submit their reviews of any such product to the DPR. The registration specialists also should let registrants know that, if the registrant provides these U.S. EPA evaluations with their California submission, the review process could be reduced if the quality of the U.S. EPA evaluation is sufficient.

The DPR will need to ensure that when obtaining U.S. EPA reviews from a registrant that: (1) the registrant submits all of the review, and (2) the review has not been altered in any way. Also, the issue with data compensation for data studies will need to be addressed. The U.S. EPA can and does look at data belonging to others that the DPR may not be able to use legally.

The DPR also should:

- Work with the U.S. EPA to routinely share data evaluations
- Increase efforts to develop agreed-upon relevant testing guidelines, protocols, and standards for evaluations and data interpretations
- Design and deploy a pilot project to determine whether the U.S. EPA actually implements the guidelines, protocols, and standards for review of data
- Determine if U.S. EPA data evaluations can be used in place of a second, redundant evaluation of the same data by the DPR (this could be a case-by-case determination)
- Ensure that the U.S. EPA understands that registrants support information sharing between the two regulatory agencies.

This change will require that U.S. EPA data evaluations meet defined standards for quality, and that the U.S. EPA provides their data evaluation reviews (DERs) to the DPR as soon as they are completed. The DPR would waive its review of data that the U.S. EPA has already reviewed based on the agreed upon review standards.

The DPR would continue evaluating data for those products (e.g., anti-microbial, biochemical) and label issues (e.g., use conditions, mitigation measures) that the DPR determines are not thoroughly evaluated by the U.S. EPA.

9. Process Improvement Recommendations *(continued)*

P3. Expanded use of expedited minor product label changes

Increase the number of requests to the U.S. EPA to expedite minor product label changes identified by the DPR during the registration process. The objective is to reduce the time required to approve the label change. Since March 1999, the DPR has submitted six labels with suggested changes to the U.S. EPA for review and approval. The U.S. EPA has responded very quickly in all these cases, a significant improvement to the months required by the U.S. EPA several years ago to send the approved label back to the DPR.

The DPR should require all registration specialists to look for opportunities to increase the number of such expedited requests to the U.S. EPA. The DPR also should ensure that this expedited processing is acceptable to registrants.

P4. Expanded list of products not requiring scientific data evaluations

Expand the number of products that, under specified conditions, can be registered without evaluation of scientific data. The objective is to reduce the time required to register these products. Currently, the DPR registers without conducting data evaluations certain products that are the same as others previously registered. An example is an antifouling paint containing copper oxide as the only active ingredient that has a specified formula and use, and for which the registrant has provided a letter of authorization from the owner of the scientific data. The DPR should form a team and, with the approval of DPR scientists, determine if other products can be registered without data evaluation. The DPR should add such products to the current list of such products, and inform all registration specialists and registrants of the changes.

P5. Earlier posting of 30-day notice

Post the 30-day public notice earlier in process (at the time a submission enters evaluation). The objectives are to reduce calendar time and obtain more substantive public involvement in the actual evaluation.

The DPR should evaluate the advantages and disadvantages of earlier posting, and then decide whether the 30-day notice could be posted earlier for any type of submission. The potential submissions that are candidates for an earlier posting include those already thoroughly reviewed by either the DPR or the U.S. EPA:

- ❑ Section 3 new product and new California a.i., product registered with U.S. EPA
- ❑ Section 3 new product and current a.i., product registered with U.S. EPA
- ❑ Section 3 new product/distributor registration, basic product not registered in Calif.
- ❑ Substantive label change, approved by U.S. EPA
- ❑ Adjuvant for current a.i.
- ❑ Section 5 experimental use permit
- ❑ Section 24(c) special local need.

9. Process Improvement Recommendations *(continued)*

P6. Adopting international data submission templates

Form a workgroup and determine which internationally adopted templates that the DPR will adopt for submission of data. The objectives are to reduce unnecessary time spent by registrants reformatting data for California and reduce the time required to register a product. The DPR does allow a registrant to submit data in the same format used to submit to the U.S. EPA, but has not yet accepted the international templates adopted by Canada's Pest Management Regulatory Agency (PMRA).

This workgroup would work with Canada's PMRA and the U.S. EPA to adopt standard templates for data studies submitted. The PMRA already has developed and distributed dozens of such standard templates resulting from its four-year electronic submissions pilot project. The templates support a standardized evaluation process within the PMRA. The U.S. EPA, under the North American Free Trade Agreement (NAFTA), has adopted these templates as the standard evaluation template. The templates also have been circulated to the European Union and the Organization for Economic Co-operation and Development (OECD). If DPR adopts any of these templates, it should let registrants know that using the templates would benefit both the registrant and the DPR.

P7. Obtaining U.S. EPA antimicrobial efficacy data evaluations

Ask the U.S. EPA and the registrant to provide a copy of every completed U.S. EPA efficacy data evaluation report for antimicrobial products being reviewed by the DPR. The objective is to reduce the time required to register these products. DPR has not pursued waiver of efficacy data submission and evaluation of antimicrobial products, as allowed by Senate Bill 464, 1997. The primary reasons the DPR did not initiate the program are that the U.S. EPA has: (1) completed data reviews on less than 20 percent of antimicrobials submitted, and (2) not provided any efficacy data evaluations to the DPR.

The DPR should use all means possible to get completed U.S. EPA data evaluation. Efforts could include:

- Letters from the Cal EPA Secretary, DPR Director, Assistant Director, and Branch Chief to counterparts at U.S. EPA
- Regular (monthly) conference calls with U.S. EPA management
- Personal calls from DPR scientists to U.S. EPA scientists
- Personal calls from DPR Counsel to U.S. EPA counsel to identify and resolve concerns U.S. EPA has about releasing evaluations to the DPR
- Requests to registrants to submit the U.S. EPA evaluations with their California submission
- Additional formal requests to associations representing antimicrobial registrants.

9. Process Improvement Recommendations *(continued)*

P7.	***(continued)***	The DPR also will need to design and deploy a pilot project to test whether the U.S. EPA has actually implemented the guidelines, protocols, and standards for review of efficacy data evaluation reports (i.e., can DPR use them?). The objective of the pilot is to determine whether the DPR can waive the submission and review of efficacy data.
P8.	**Registrant access to DPR evaluation products**	Provide to the registrant any DPR product as soon as it is being used for DPR decision making. The objectives are to obtain clarification/corrections from the registrant earlier in the process and reduce the time required registering a product. The DPR should send to a registrant any signed evaluation report and the coded product label (from the database) for the registrant to review and provide feedback. Providing an evaluation report, particularly those that claim the data do not support registration, can reduce the overall time needed for registration because the registrant would have an earlier opportunity to either resolve the deficiency or withdraw the submission. Providing the product label database information would allow the registrant to review it for completeness and accuracy, resulting in fewer errors in the product label database. This recommendation does not specify how the DPR product is provided to the registrant, just that it be provided so as soon as it is being used for DPR decision making. These notifications could be done electronically, with an e-mail notification that contains either an attachment or a hyperlink to both the evaluation report and to a product label query screen. The DPR already posts chronic toxicology summaries on the Internet.
P9.	**Measuring actual time spent on registration activities**	Organize and charter a team to identify process and database changes necessary to capture the actual time spent on evaluating submissions and improve existing performance measures. The objective is to determine the best approach to measuring the actual time spent by staff on registration activities. The time spent on registration activities would provide accurate information to manage assignments, determine an evaluator's availability, provide information needed to forecast when the DPR will complete its evaluation of a specific submission, and upgrade 20-year old statutory turnaround requirements. Currently, the DPR measures total elapsed time spent at a workstation, without distinguishing work time from wait time (in a queue). If the DPR measured actual hours spent on each registration activity (e.g., preparing an evaluation report), it could develop accurate workload statistics, prepare estimates of the hours needed to review each submission, and identify who performed each evaluation. Reports on this new measure should be accessible to all employees.

9. Process Improvement Recommendations *(continued)*

P9. ***(continued)***

This recommendation does not require timesheets, an approach that also could capture hours spent working on a submission. Certain DPR evaluation staff already use timesheets to comply with federal accountability and management requirements. Also, several State of California departments have for years required employees to use timesheets. These include Caltrans, the California Energy Commission, the Bureau of State Audits, EDD's program review branch, the Commission on Teacher Credentialing, and the State Controller's Office audit division. Timesheets can be used in state service for management purposes only, not timekeeping or payroll. Unfortunately, changing the current practice of not reporting time spent working will be difficult for several reasons. Therefore, an estimate of time spent on registration activities could be developed that does not require more accurate timesheets.

Current regulatory timeframes were established in1981. Since then, the legislature has enacted several laws that require significant increases to the volume of data that must be submitted by registrants and evaluated by the DPR. The team should evaluate what, if any, changes should be made to these timeframes.

This new measure of time worked on a submission will require substantial change to the underlying structure of the Oracle tracking database, if that database is used to record time worked on a submission.

P10. Increased training and documentation for registering a product

Provide more specific written instructions and workshops to the regulated community. The objective is to reduce the proportion of submissions that are returned to registrants because of deficiencies. This would include developing and conducting pesticide registration workshops to clarify registration requirements and to provide training. These workshops can be targeted (i.e., antimicrobials) or general (i.e., application requirements).

The DPR should enhance existing materials with more specific information and develop new materials for the following components:

- *How to register a product* – a simple overview of when a registrant must register a product in California, and the steps necessary to register a product
- *Answers to frequently asked questions* – attempts to answer questions that new registrants often ask. These could include identification of typical causes that could delay the final decision on a submission. Accuracy of the information is greatly assisted by its frequent exposure to criticism by an interested, and occasionally well-informed, audience
- *Application checklist* – a list of every item that must be included with a submission, which will vary by type of submission, in order to be considered complete and ready for review and evaluation by DPR.

P10. ***(continued)***

- *A decision tree* – a description of how each registration type will determine the level of evaluation by the DPR and the type of final DPR decision
- *Process map* – a picture of how a submission will be routed within the DPR (e.g., intake, technical evaluation, sequential or simultaneous scientific evaluations, and final decision)
- *Registration types** – a list of each regulated registration type (as defined in statutes)
- *Processing priorities* – the basis for selecting the next submission that is waiting to be processed (e.g., chronological, special priority)
- *Performance standards* – commitment from the DPR to the number of days that it expects will be needed complete each major registration activity (intake, technical evaluation, scientific evaluation, and final decision)
- *Data requirements for submissions* – clear description of DPR policies and clear instructions that registrant must tell DPR which set of studies are for each of the DPR's workstations (e.g., which data sets in the data volumes are to be evaluated by the Medical Toxicology Branch)
- *Data acceptance criteria* – a statement that criteria and guidelines are the same as U.S. EPA's, except as noted, then a clear list of the differences (where evaluations are not harmonized)
- *Procedures ("desk") manual** – policies, procedures, and enabling statutes/regulations for conducting all aspects of registration and license renewal.

Similar to existing features available on the DPR's Intranet, access to this documentation should take advantage of point and click tools to drill down on subjects of interest to the end-user.

* Currently exists.

P11. Quicker notification of deficient submissions

Complete current efforts to evaluate the benefits, organization, and required system modifications of a consolidated screening function. The objective is to reduce the time needed to notify registrants that a submission is deficient. The DPR also should determine causes for deficient submissions, identify solutions to address the causes, and reduce the proportion of submissions returned. Deficiency letters sent to registrants could provide a Web address to DPR guidelines.

P12. Public record legal opinion

Obtain a legal opinion to determine which public reports must be prepared and when a registration work product becomes a public record. The objectives are to clarify responsibilities and establish criteria for determining whether a product is a public record and when it becomes so. Doing so will clarify when certain work products, such as an evaluation report, could be made available to the public.

9. Process Improvement Recommendations *(continued)*

P12. ***(continued)***	The DPR could form a special advisory group to determine where the DPR is most vulnerable and determine which public reports must be prepared. If needed, the DPR should develop regulations that are more precisely worded and that reflect current practices and constraints on DPR.
P13. Standard for linking documents	Link documents by the industry standard already in use at DPR: the chemical code. The objective is to provide a means to get end-users information that matters to them. Documents from related business processes can and should be linked together, and business processes changed to allow controlled access to relevant information, everywhere. Documents to be linked are generated from the following DPR processes: ❑ Pesticide registration ❑ Risk assessment ❑ Risk mitigation ❑ Risk management ❑ License renewal ❑ Research authorization ❑ Reevaluation.
P14. Two-year registration licenses	Extend registration period from one year to two years. The objectives are to avoid year-end bottlenecks that delay renewals and possibly submission reviews, and reduce registrant and DPR workload. The DPR evaluated the feasibility of extending the current one-year registration period to two years and found no significant barriers. The only issue that appeared to be a constraint was the timing of the registration renewal fees (every other year vs. every year). There was no financial or legal evidence provided that timing of revenues matter.
P15. Eliminate unnecessary license renewal activities	Eliminate any licensing renewal activity that does not add value to the registrant or DPR. The objective is to reduce the cycle time and staff hours required to process license renewals. Registration specialists and branch management will need to change existing practices that lead to a number of these non value added activities.

9. Process Improvement Recommendations *(continued)*

P15. ***(continued)***

Appendix D to this report presents specific registration license renewal activities that the DPR should eliminate. Modifications to existing databases that would allow a few of these changes to be made are presented in the subsection **K. Information Technology Improvements**, later in this pesticide registration process section.

P16. Clearly defined rules for prioritizing submissions

Confirm and publish the basis for selecting the next submission that is waiting to be processed. The objectives are to communicate clearly to registrants, provide business rules to registration specialists and scientists, and increase DPR's throughput. For example, the DPR's current basis for selection could be stated as:

> *"Submissions are evaluated in chronological order, based on the date the submission is received by the Department."*

An alternative statement that would reflect short interval scheduling (see below) and implementation of a consolidated screening function to identify deficient submissions earlier could be:

> *"Submissions are evaluated in chronological order within each registration type, based on the date the submission is accepted for review."*

In cases of one-time events (e.g., glassy-winged sharpshooter), the DPR should publish temporary priorities. Simple reviews that will take less than a determined number of hours (e.g., one hour) should be considered as a higher priority. This "short interval scheduling" priority is a statistically proven manufacturing solution frequently used to increase total throughput. For example, holding up four submissions requiring one hour each for a submission that came in one day earlier requiring one month will delay four submissions by one month, versus one submission by one day.

P17. Performance standards

Establish and publish the DPR's goal for the number of days to process a submission. The objective is to give registrants an idea of when DPR will make the final regulatory decision (register or deny) on any submission. Current time frames in regulation do not account for either frequent deficiencies found in registrants' submissions that can "stop the clock," nor the Legislature's requirements for significantly more scientific data that the DPR must evaluate (e.g., Senate Bill 950).

For each registration type, the DPR should establish a goal for the number of days to complete each major registration activities: (1) screen, (2) evaluate, (3) reevaluate (in response to evaluation deficiency), (4) review label, and (5) make final decision.

9. Process Improvement Recommendations *(continued)*

P18. Elimination of redundant tracking systems

Eliminate registration tracking systems now used by the Medical Toxicology Branch and the Worker Health and Safety Branch. The objectives are to eliminate unnecessary staff time required to enter the same tracking data that the Registration Branch already captures and eliminate time spent by technology support staff to maintain the two redundant branch tracking systems. The DPR will need to update the Oracle-based registration tacking system to provide at least one additional identifier for an individual submission: to whom the registration submission is assigned. The Medical Toxicology Branch and the Worker Health and Safety Branch both require this capability to manage submissions.

P19. Improved product label database accuracy

Identify primary data corruption issues and root causes of product label database data errors, then develop and implement a plan to address the highest priority issues. The objective is to assure that the product label database accurately reflects what is on the registered label. The DPR should convene a work group to determine a strategy and plan to improve known data errors. This should include a review of how the database would be used to support requirements of the Healthy Schools Act of 2000.

It appears that the top priority is to determine a solution to coding of sites/crops on the product label database so that the database correctly reflects sites/crops actually on the label. Currently, the DPR adds crops that are not on the registered label in order to accommodate editing of county pesticide use reports.

One possible solution is to create a new product label database table (entity) that contains the additional site/crop codes added to accommodate pesticide use reporting needs. The DPR then would populate the existing database table with codes representing only those sites/crops on the registered label. Public views of the product label database would clearly distinguish crops actually on the registered label from crops added to accommodate pesticide use reporting.

The additional crop codes necessary for PUR editing are identified in the "label coding manual." This manual provides for each crop code any additional crop codes that must be added to accommodate use reporting. Staff that key enter crop data lookup a crop's code, determine if additional codes must be added, and key enter the additional codes. Although entry of these extra codes should be continued (but distinguished from crops actually on the label), the DPR should automate the entry of the additional codes needed for PUR editing. This would reduce staff time to look-up, to key enter the additional crop codes, and to confirm that the additional codes were entered correctly.

Another quality issue noted by registrants is the accuracy of the pre-harvest interval and re-entry interval noted on the product label database. These do not always match the intervals on the product label.

9. Process Improvement Recommendations *(continued)*

P20. Clarification of late renewal fee structure

Evaluate late fees to make commensurate with impact on the DPR (increased staff time, lost mill assessments). The objective is to provide a clear incentive to renew product registrations on time. This will require refining existing statutes and regulations to define specifically: (1) when a product is registered, (2) if renewed late whether it can be registered retroactively or must be re-registered, and (3) if renewed retroactively, whether the mill can be assessed.

P21. Other improvements

- Eliminate efficacy data evaluations for any product that is registered in Canada (Canada's efficacy standards are stricter than California's) provided that data submitted meet California data requirements
- Accept U.S. EPA's confidential statement of formulation.
- Require registration specialists inform each scientific discipline that prepares an evaluation report for a product about the findings from the other disciplines whenever one of the evaluation reports might impact one or more of the other evaluation reports. Currently, no formal process exists, and this discussion does not always take place
- Prepare summary reports suitable for general public consumption that interpret scientific studies completed by the DPR for every active ingredient. The DPR had briefly prepared these reports in the late 1980s and early 1990s.
- During evaluation, retain all registrant data volumes in the registration library, and circulate them following existing practices. The DPR could automatically notify evaluator(s) that data were received. This change will require updates to the tracking and library circulation systems.
- Establish and enforce policies to post on website any activities initiated by the DPR that will result in a formal product (e.g., risk assessment initiated, peer review initiated).
- Allow more decisions to be made by branch chief or branch staff.
- Update, reprint, and distribute the product label coding manual. The objective is to ensure all users have the latest directions for populating the product label database. The current version is up to six years old and relies on handwritten notes on hardcopy to document cumulative changes to the manual.

P21. ***(continued)***

- ❑ Improve process for developing, prioritizing, and approving budget change proposals (BCPs). The objective is to increase the proportion of BCPs approved by control agencies. According to staff, BCPs often are poorly written, not adequately discussed with subject matter experts, and presented to control agencies for approval without direct involvement of the process owners at formal meetings. Improvements include:
  - Carefully researching and including potential benefits to a maximum number of DPR programs and external stakeholders. The Department of Finance has denied prior BCPs because the intended beneficiaries were a narrow group of stakeholders
  - Bringing process owners and/or subject matter experts to formal meetings with control agencies. These experts often are well prepared to defend and promote a BCP
  - Obtaining direct assistance from the Information Technology Branch in developing program BCPs.
- ❑ Provide training to managers and staff to utilize existing Intranet access capabilities to the Oracle registration tracking system performance data. This includes any DPR employee involved with registration and any that need to know the status, location, and processing times of submissions.

10. E-Government Candidates

EG1. Electronic product label pilot

Prove concept of submitting and processing a product label electronically. The objectives are to determine the feasibility of the concept and confirm requirements and options for preparing, delivering, reviewing, and archiving an electronic image of a product label. This includes evaluating software products that can be used to compare product labels electronically.

Approximately 50 percent of registration specialists' time (or approximately 15 PYs) is spent comparing product labels. Software has existed for years that can perform this same task, offering a solution to reduce workload and turnaround time for label reviews. Registrants themselves are evaluating and have used such software, and the DPR should identify the lessons learned from registrant experiences.

In addition to testing the concept of comparing labels electronically, this pilot also would include the following:

- ❑ Requesting confirmation from the registrant that the electronic label submitted is identical to the one attached to the product sold in California
- ❑ Providing a link from the product label database to the electronic product label, allowing end-users to search the database and then view a product's registered label
- ❑ Allowing keyword searches across actual product labels versus the subset of a label's content that is captured in the product label database.

EG2. Electronic registration submission pilot

Prove concept of submitting and processing the entire registration submission. The objectives are to determine the feasibility of the concept and confirm requirements and options for electronically preparing, delivering, processing, evaluating, and archiving the application, product information, scientific data, product label, and fee. Electronic submissions can reduce:

- ❑ Registrant investments to support a paper-based process to create, print, scan, reprint, audit, format, compile, index, archive, and submit data studies
- ❑ DPR costs to open, store, transport, retrieve, review, find data, extract data, compile data, file, retrieve, store, and archive data studies
- ❑ DPR costs to review and compare product labels
- ❑ DPR costs to open, log, route, record, report, deposit, and reconcile payments
- ❑ DPR time needed to thoroughly evaluate and make a decision on a submission.

EG2. ***(continued)***

Consistent requirements for pesticide registration submissions are global needs, and international bodies are working to address these needs. Canada's Pest Management Regulatory Agency is the leading regulatory body in adopting electronic submissions, with four years of planning and nine pilot submissions to-date. It has developed and shared with the international community extensive documentation of this pilot. The DPR should leverage the knowledge and experience of Canada in order to better serve registrants, reduce the costs of developing the pilot, and ensure more international capability and consistency. DPR should participate in U.S. EPA's electronic submission workgroup to ensure that format standards are consistent.

The DPR should develop guiding principles for this pilot, which could include the following:

- Collaborate with registrants, DPR, and international entities
- Prove concept of operations and reduce risk of failure
- Gain efficiencies for registrant and DPR
- Allow users to determine solution
- Allow for a range of registrant capabilities
- Use open, flexible standards, and mainstream Internet technologies
- Provide a cost-effective solution
- Share pilot results.

The pilot should ensure that electronic data submitted are unalterable and secure. As has been demonstrated and allowed in Canada's PMRA, evaluators probably will want want hard copies of scientific data rather than only being allowed to review the data from a computer screen.

EG3. Online registration guidance and information

Provide Internet access to materials that will help registrants through all aspects of registering products. The objective is to reduce the proportion of submissions that are returned to registrants because of deficiencies. Types of instructional materials are described under a separate process improvement initiative presented earlier in this section (number P10). The DPR should, as much as possible, design these materials for access on the Web. For example, an interactive session could help a registrant determine the type of product that it plans to submit, and then provide the checklist of items that must be provided to the DPR for that type of submission. Also, the DPR already plans to include in the registration desk manual in-text links to the statute(s) and/or regulation(s) that enable the particular step or requirement being described.

EG4. Online application

Allow registrants to complete and submit a product registration application form online. The objectives are to help registrants more quickly submit a complete and correct application form and reduce DPR resources needed to verify data, file and route hardcopies, populate DPR databases (where possible without required scientific data studies), and receive, record, route, and deposit payments. This recommendation does not include electronic submission of the scientific data studies (listed separately, above).

Potential capabilities of the online form could include:

- ❑ Ensure required fields are completed
- ❑ Ensure total percentages for source products and for ingredients each add up to 100 percent
- ❑ Allow lookup of currently registered active ingredients and chemical nomenclature
- ❑ Calculate specific gravity if density for a liquid product is provided on form
- ❑ Request only the information needed, based on the type of submission
- ❑ Populate existing DPR databases
- ❑ Accept letters of authorization electronically
- ❑ Accept payment.

One of many issues that must be addressed with an online application is ensuring that hardcopy data submitted with an electronic application are uniquely linked to that application (e.g., a unique identifying code assigned at time of online registration). DPR may need the data volume first. Staff cannot create the pesticide data index without the hardcopy, so it may not be useful to DPR to use an online form that populates appropriate databases. An online form would be useful to registrants.

EG5. Secure Web access to registration reports

Provide secure Web access to pesticide registration reports. The objectives are to share information, reduce the turnaround to fulfill public record requests, and leverage findings and conclusions for future evaluations and assessments. These reports include:

- ❑ Product registration evaluation reports from all scientific disciplines
- ❑ Risk characterization documents, including all attachments
- ❑ Risk mitigation documents
- ❑ Public reports or dossier/monograph about pesticide evaluations (not currently prepared by the DPR) that interpret scientific studies completed by the DPR.

EG5. ***(continued)***

The DPR should allow an end-user to search these reports by keyword and other criteria (e.g., author's name), and automatically notify stakeholders that have told the DPR that they would like a copy of the report when published on the website. If this capability cannot be managed for public access, at a minimum it should be developed on DPR's Intranet for staff access. This suggestion of secure stakeholder access may result in full access to the general public.

EG6. Internet access to registration databases

Provide Internet access to pesticide index and chemical information databases. The objective is to provide end-users valuable historical data that can be useful in preparing a submission, satisfy public record act requests, and research a chemical. The DPR already has documented the need to upgrade the database engine (Oracle), make structural improvements to these databases, and make them Internet accessible.

The two primary databases currently accessible on DPR's Intranet that should be provided on the Internet are:

- *Pesticide data index*. This index (aka "library of studies") contains a detailed index to approximately 162,000 studies contained in 55,000 volumes in support of product registrations. Among the many data elements captured in this database for each data study are the study's title, data owner, test type, chemical code, DPR's unique identifier, and U.S. EPA's unique identifier. It supports three business needs: (1) managing the physical storage and retrieval of the hardcopies, (2) summarizing what is in the study, and (3) satisfying public record act requests. The DPR should review data study titles to ensure that they do not reveal *confidential product formulation.*
- *Chemical information*. This database is used to collect regulatory information on chemical ingredients. It is extremely useful to DPR staff to identify the status of a chemical (e.g., registration status, regulatory information/reports, number of actively registered products containing the chemical). The potential exists to use this database to identify all reports prepared by DPR that are relevant to a chemical, and whether any DPR branch is doing something regarding the chemical (e.g., reevaluation, enforcement activities, policy letters).

EG7. Online license renewal

Allow registrants to renew product licenses on the Internet. The objective is to reduce the time between preparing renewal notices and issuing a renewed license. The DPR could initiate the renewal process by e-mailing a reminder to the registrant that it is time to renew their license, providing a direct hyperlink to DPR's online registration renewal site. The renewal site would allow registrants to log in, view and update contact information, view current products registered, indicate those products that are to be renewed and those that are not, calculate the total fee, and pay the fee. The DPR then could send a second e-mail to the registrant to confirm the transaction and payment amount, provide a transaction code, and deliver the license for printing locally.

Current renewal requirements are fairly simple, requiring only a returned, pre-preprinted form and payment from the registrant. Conditional registrations may be somewhat more complex because they do not fit this model.

EG8. Online access to current license image

Develop the capability to display the image of the current product license on DPR's external website. The objectives are to reduce resources unnecessarily spent printing, filing, retrieving, and refiling the hardcopy license, and ensure that the license provided to those requesting it is the correct license. The DPR has developed this capability, but it was put on hold for a variety of reasons. The DPR should develop the capability to automatically generate the PDF of the current license directly from the registrant/firm and licensing/renewal databases, and post this license to the Internet. Search capabilities then should be provided to retrieve the license that contains an individual product or the license for an individual registrant.

EG9. Other candidates

- Develop and post on DPR's website statistics on, and causes for, incomplete applications that are returned to registrants. The objectives are to help registrants identify common application deficiencies and to help DPR refine training and documentation materials.
- Place a clearly labeled link on DPR's home page to the registration process and particularly the registration ombudsman.
- Provide links to other State of California sites with pesticide information (e.g., Department of Health Services, Department of Toxic Substances Control).
- Enhance Internet-based query capabilities to identify whether a product is a restricted pesticide and why it is restricted. This enhancement will require change in the database structure (each product would have a note explaining the reasons for restrictions).

EG9. ***(continued)***

- Provide more user-friendly reports in response to public record requests for data studies. When providing electronic copies in response to these requests, the DPR should consider providing the requestor with the tools to sort the electronic copies by requested fields (e.g., by test type). Also, one of the current pesticide data index reports that the DPR provides in response to public record requests should be modified to provide the following additional fields (if recorded in the pesticide data index):
  - U.S. EPA-assigned master record identification number (MRID)
  - Source of study
  - Registrant's name
  - Data owner.

IT1. Oracle upgrade and database modifications

Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to upgrade databases that support registration from Oracle 7.3.4 to Oracle 8 and to make other identified improvements. The objective of the software upgrade is to maximize Cold Fusion functions, optimize queries, and speed up performance. The objective of the identified improvements is to enable current process improvement and e-government plans. *The objective of the project plan is to reduce the risk of failing to implement the planned upgrades and modifications.

The fifteen existing Oracle 7.3.4 databases include the following four mission critical databases:

- Pesticide registration tracking
- Pesticide data index
- Product label
- Licensing/renewal.

In order to confirm these plans and begin work, the DPR should identify the general scope, costs, PYs, skill sets, and schedule needed for each project. The project scope should include a feasibility study report(s). The project sponsor should present each project plan to an investment review council (e.g., as recommended in the readiness assessment report). The review council would prioritize and select the projects to implement.

* Database modifications are documented in a November 29, 2000, internal DPR document titled: *BCP/Data Processing Applications*. These modifications include correcting erroneous data, providing missing data, providing Internet and/or Intranet access to databases, upgrading or replacing entire applications, altering database structures, tracking registration submissions simultaneously, capturing registration reviews, identifying persons assigned a registration submission, and supporting chemical classification.

IT2. Product label database improvements

Obtain an electronic copy of U.S. EPA's list of pests and populate the DPR product label database with this list, for those registered products with matching U.S. EPA registration number. The objective is to allow end-users to identify or confirm products registered for a specific pest. If DPR does not approve a particular pest claim, the registrant may have deleted the pest from the California-approved label. Also, a registrant may choose not to include a certain site and its pests on the California label.

IT3. Licensing/renewal database improvements

Make modifications to the registrant/firm and the licensing/renewal databases to support staff research and license renewal efforts. The objectives are to ensure this database contains up-to-date licensing information and reduce the time required to renew licenses. The DPR should make modifications to the databases to provide the following capabilities:

- *Company name changes* – allow the correct *Application for Renewal* form and the correct license be printed for every company, including those that have had a name change. Currently, license renewal staff must prepare the renewal notices for approximately 75 companies on a typewriter, and carefully compare the name and coding of every product typed on the form with the product name and code shown in the database. This is done to ensure that each product is listed on the correct company's typed renewal form. This change may require that the databases maintain a history of name changes and product assignments.
- *Conditionally registered products* – allow an end-user (e.g., a registration specialist) to record the condition that must be met and the date by which the registrant must meet the condition, and to indicate whether the product is fully registered, invalidated, or continued. This update should require either a link to, or entry of, the product's U.S. EPA registration number (with DPR appended codes) to ensure updates are made to the correct product.
- *Registration specialist access* – Allow registration specialists to update selected information about products and registrants in the registrant/firm and licensing/renewal databases. This should include company name changes, conditional product registration notes, and conditional product registration status.

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Licensing and Certification Process

Process Description

License Application

- The DPR receives requests for new license applications by e-mail, fax, letter, or telephone, or in person. Licensing and certification staff may assist a new applicant with determining the type of license or certificate required, which are the following:

Individuals

- Agricultural pest control adviser (PCA) license
- Qualified applicator license (QAL)
- Qualified applicator certificate (QAC)
- Pest control dealer's designated agent license
- Journeyman pest control aircraft pilot certificate
- Apprentice pest control aircraft pilot certificate
- Private Applicator Certificates

Businesses

- Maintenance gardener pest control business license
- Pest control business license
- Pest control dealer business license
- Pesticide broker license.

Requirements for each license and certificate are summarized in **Appendix E** of this report.

- The DPR reviews applications to determine that they are complete and to assure applicants meet various minimum requirements. Each individual license and certificate holder must pass a laws and regulations examination. PCAs, QALs, QACs, and pest control aircraft pilots also must pass at least one category examination in order to receive a license/certificate. PCAs also must meet a minimum educational requirement. Pilots must provide a valid Federal Aviation Administration (FAA) pilot's certificate and a copy of a valid FAA medical certificate card. Businesses in general must provide a fictitious business statement, a certificate of good standing, financial assurances, a valid qualified applicator license or certificate, and worker's compensation insurance information.

- The DPR staff proctors approximately 40 different examinations statewide from March through November. Examinations are proctored every other month at one location in the northern, central, and southern areas, and annually at one coastal location. Applicants also can take the examinations in Sacramento on months that examinations are not scheduled (DPR provides if absolutely needed). The DPR provides Internet access to some of the study guides and materials necessary to pass the examinations. The DPR scores exams and posts results of each person's exam on its website.

Process Description *(continued)*

- The DPR mails an embossed license or certificate card with a letter to the applicant. The DPR logo on licenses and certificates are color coded to indicate the license type. Each license and certificate is valid for a two-year period, beginning on January 1. Valid period depends on when they enter the licensing cycle. It can be one year or two years (or less).

- Each year, the DPR prepares and mails renewal notices to approximately half the licensees. License and certificate holders with the last name beginning with A through L renew in even years and M through Z in the odd years. The same cycles also apply to businesses, based on first letter of the business name.

- The DPR then reviews returned renewal applications. PCAs, QALs, QACs, and pilots must complete required continuing education during the valid period of their license in order to renew their license, and indicate these on their renewal application. Otherwise, they must re-exam to obtain their license or certificate again. For individuals, the DPR reviews the renewal application to determine the application is complete, fees submitted are appropriate, and minimum continuing education (CE) requirements are met.

- For individual licenses, the DPR spends most renewal processing time following up on five percent of renewals with questionable CE attendance. About 80 percent of applicants include a CE attendance summary with their application (the CECPM prepares these summaries as a service to CAPCA members, and PAPA members have their own system)[1]. The DPR simply accepts this summary as proof of attendance. For 15 percent of renewals, the DPR compares CE courses and hours with the CECPM's master CE course list to confirm attendance. For the remaining 5 percent with questionable CE attendance, the DPR obtains an applicant's CE attendance summary from the CECPM, if available. The DPR may contact an applicant directly to ask for proof of attendance. The DPR rejects approximately one percent of renewals because the applicant failed to provide adequate proof of CE attendance.

- Before renewing a business license, the DPR reviews the renewal application to determine the application is complete (including updated financial assurances, qualified applicator license and certificate information, worker's compensation information) and fees submitted are appropriate.

[1] CECPM is the Continuing Education Center for Pest Management, CAPCA is the California Agricultural Production Consultants Association, CAAA is the California Agricultural Aircraft Association, and PAPA is the Pesticide Applicators Professional Association

Process Description *(continued)*

- Pest control dealer license renewal process not included.
- Pesticide broker license renewal process not included.
- Each year, the DPR receives approximately 1,600 to 2,500 continuing education sponsorship request forms that each contain the proposed course outline and course description. The DPR determines whether each proposed course meets statutory criteria. If approved, the DPR completes its review of sponsorship requests by noting the course code and number of hours by course type. If denied, the DPR returns the form with the problem noted. The DPR posts those courses pending approval, and those approved, on its website and updates this list weekly.

2. Recent and Planned Improvement Initiatives

Recent Improvements

- In August 1998, the DPR teamed multiple staff together to share in brainstorming methods for responding to customer service inquiries.
- In August 1998, the DPR moved from staff specialization in reviewing a single license type to cross-trained staff reviewing multiple types of license applications.
- In September 1998, licensing and certification staff began to provide more informative voice mail message content to better assist and direct callers.
- In 1999, the DPR began to provide PDF versions of new license applications and renewal applications on the DPR website.
- In 1999, the DPR began using staff prepared weekly reports to identify reoccurring problems and/or process improvements.
- In 2000, the DPR completed the Bibliography database in Microsoft Access (available study guides, questions, and exams).
- In August 2000, the DPR consolidated multiple license renewal types into one new renewal application form.
- On January 1, 2001, the DPR replaced colored plastic license/certificate cards with a single white embossed plastic license/certificate card (with a small color DPR logo to designate license/certificate type) to improve legibility and copy quality.

Planned Improvements

- The intent to operate notification system, planned to begin production in Spring 2001, is intended to allow commercial pest control operations to pre-register with counties online. The system also would notify CACs of the status and statewide compliance history of a license or certificate holder. This system may provide DPR with greater information on certified private applicators, however stakeholders indicate concern with DPR publishing private applicator information on its website (e.g., mailing addresses and telephone numbers).

- The DPR would like to convert online PDF forms to OmniForm to allow applicants to save forms on their personal computers.

- The DPR would like to add a category M license for QALs.

- Staff would like to develop a flow chart of the licensing and certification process and provide it on the DPR's website.

- Staff has short-term plans to provide more help prompts on the licensing and certification portion of website.

3. Process Overview

Licensing and Certification Process

Inputs

- New license and certification application and fee
- License and certificate renewal application and fee
- Continuing education class or meeting accreditation requests
- Written, faxed, telephoned, or e-mailed information requests

Process

- Review new/amended license and certificate application requests and schedule examination
  - Open and log receipt of check and application
  - Create index and file (for new applications)
  - Review application for completeness (1st time)
- Conduct license and certificate examinations (required for individual licenses and certificates)
  - Develop and update examination content
  - Manage examination logistics (dates, times, locations, facilities, materials, proctor assignments)
  - Proctor examinations statewide
  - Score examinations/generate statistics
  - Provide examination results
  - Review application (2nd time)
  - Issue license or certificate, or ask for 2nd year fee, or deny
  - Create index and file
- Renew specific licenses and certificates every other year (individual renewals require continuing education credit)
  - Open and log receipt of check and renewal application
  - Review renewal (checking CE credit and/or medical certification)
  - Issue license or certificate, or deny
- Post on website current list of valid licensees and certificate holders (ongoing)
- Accredit continuing education classes and meetings
  - Receive continuing education sponsorship request form
  - Determine class or meeting content meets statutory criteria, determine hours by category, approve hours by category
  - Assign course identification number and hours by category
  - Post on website current list of accredited classes and meetings

Outputs

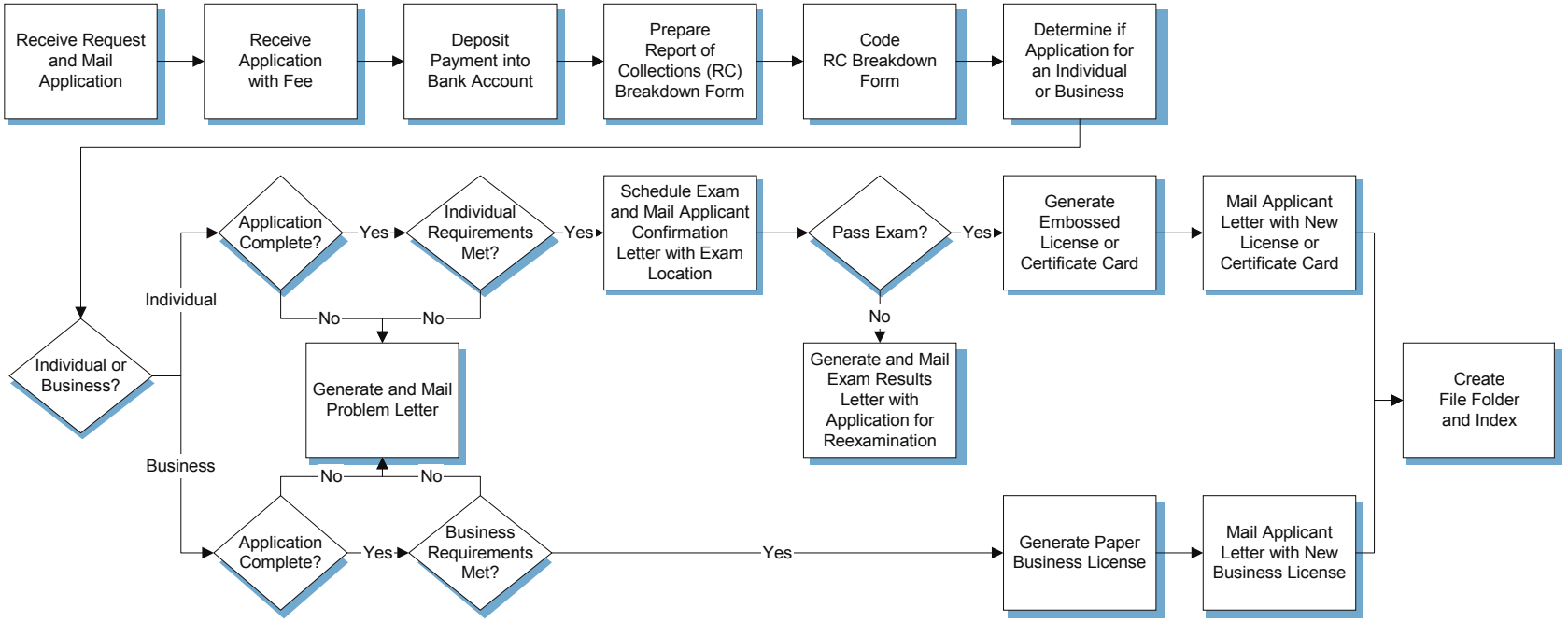
- Business licenses
  - Pesticide broker
  - Pest control dealer
  - Maintenance gardener
  - Pest control business
- Individual licenses
  - Designated agent
  - Agricultural pest control adviser
  - Qualified pest control applicator (license/certificate)
  - Pest control aircraft pilot (apprentice & journeyman)
- List of current valid licensees and certificate holders
- License or certificate exam
- License or certificate exam results
- Renewal notice
- Accreditation form with id code number and hours by category
- Accredited classes and meetings
- List of pending/approved continuing education classes and meetings
- Study materials source list
- Updates to the following databases:
  - Core
  - Exams
  - Continuing education
  - Insurance
  - Statistics
  - Bibliography

Performance Measures

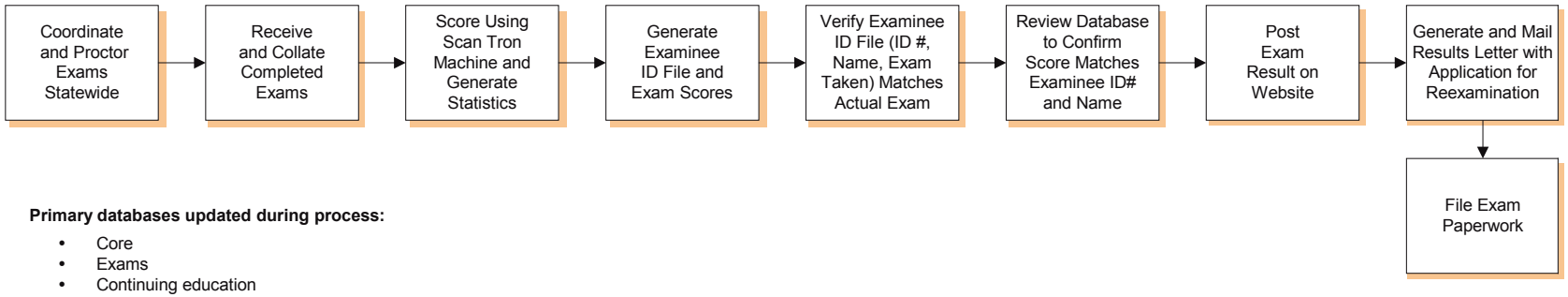
- Median number of days after receipt of a complete application to approve or deny license and/or certificate
- Median number of days after receipt of a complete application to accredit continuing education

4. Process Workflow

Application for New Individual or Business License



Examinations

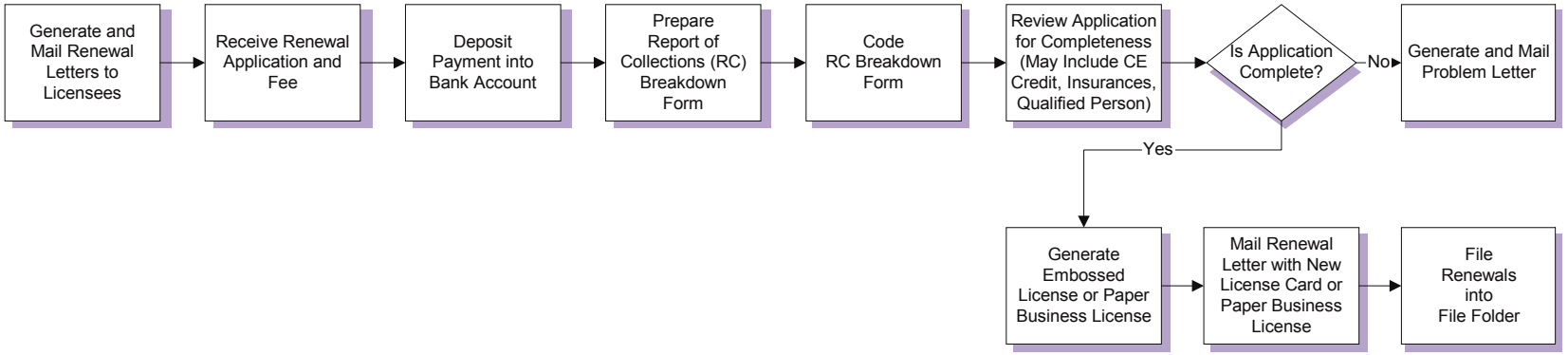


Primary databases updated during process:

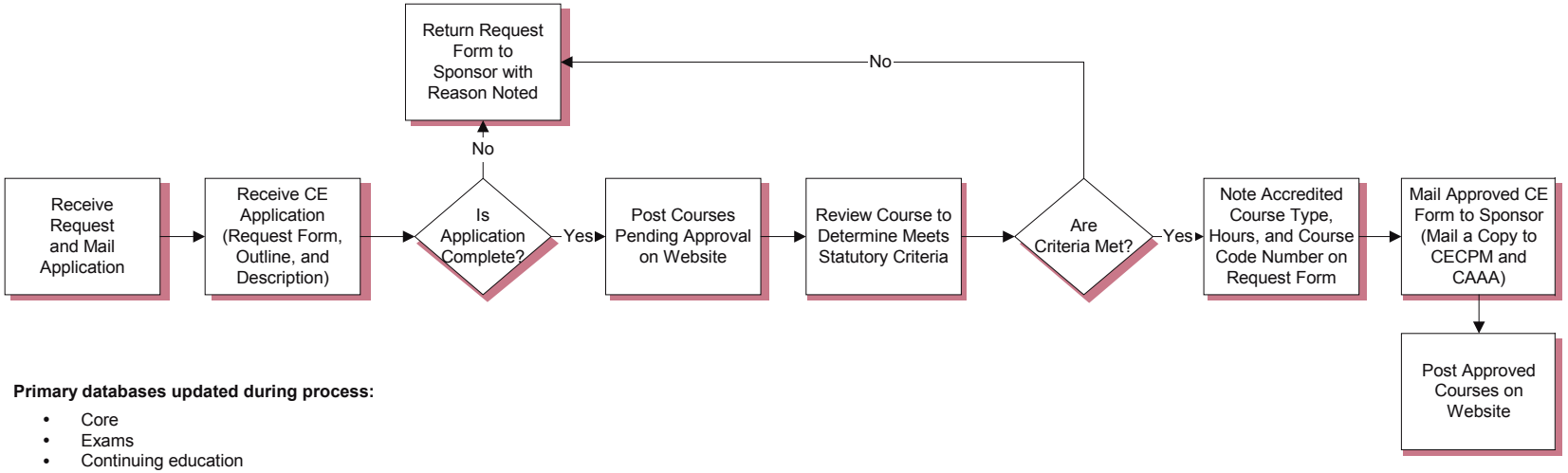
- Core
- Exams
- Continuing education
- Insurance
- Statistics
- Bibliography

4. Process Workflow *(continued)*

Application for Individual or Business License Renewal



Continuing Education (CE) Accreditation



Primary databases updated during process:

- Core
- Exams
- Continuing education
- Insurance
- Statistics
- Bibliography

5. Metrics

Workload

New applications received (1999)	2,418
New applications received (2000)	3,777
License and certificate renewals per year	13,000 to 14,000
CE courses accredited per year	1,600 to 2,500

Regulated Community

Individuals

Licensed or certified individuals with the DPR	21,000
Pest control advisers	4,400
Pilots	384

Businesses

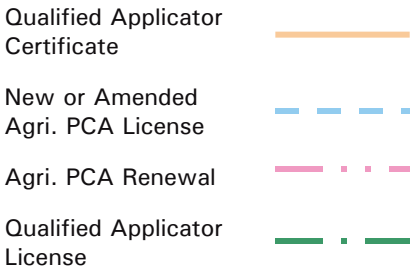
Business locations	5,774

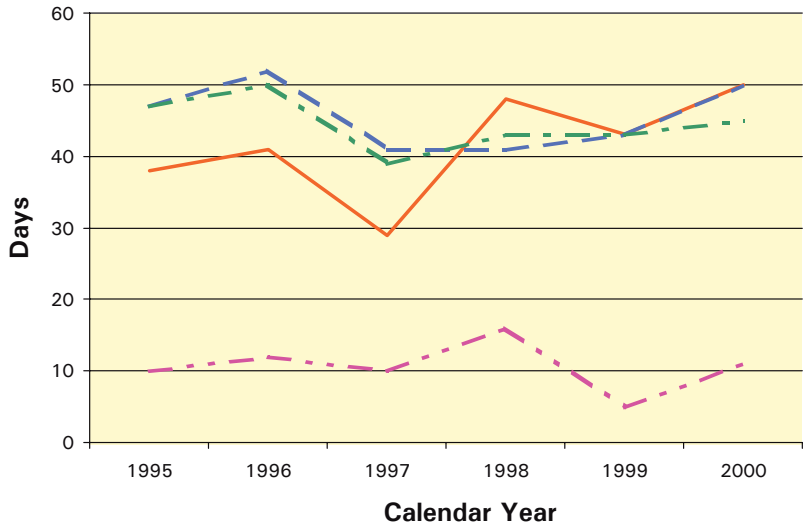
Others

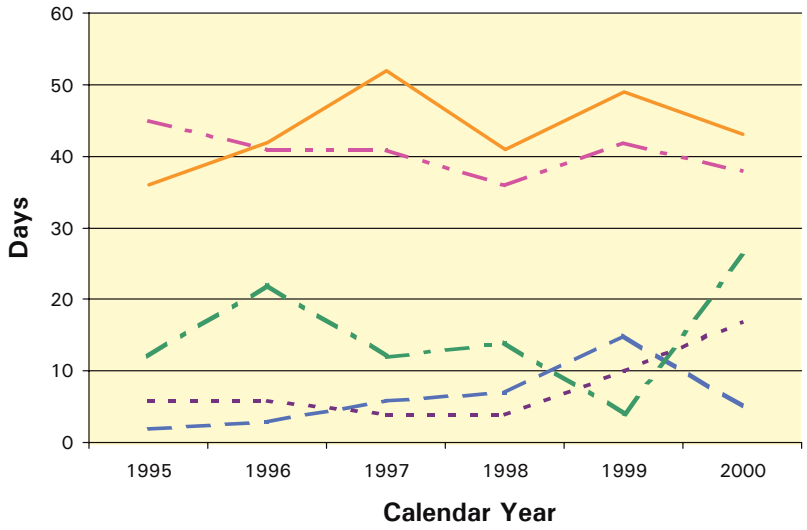
Certified private applicators (with CACs)	36,000
Applicators	40,000
Growers	55,000

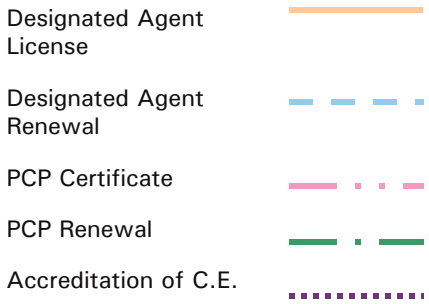
Performance

Median Days to Issue License









6. Stakeholder Information and Service Needs

Information Needs

- License and certificate requirements based on activities stakeholder performs
- When the DPR will issue the license (predictability)
- Lists of aerial versus non-aerial licensed applicators (business and individual)
- Study materials required for examinations
- Examination locations and frequency
- Minimum knowledge requirements for examinations
- List of licensed individuals, including license number, name, telephone number, license type (i.e., category)

Service Needs

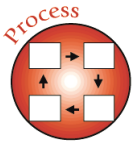
- Timely completion of a license or certificate application
- Timely completion of a license or certificate renewal application
- Timely notification of examination location
- Timely notification of examination result
- Detailed analysis of examination results to examinee (occasionally)
- Timely approval of a continuing education course
- Prompt return of telephone call, e-mail, or fax

7. Strengths

People

- Long history of staff experience with licensing and certification process.
- Limited staff turnover.
- Clearly defined roles and responsibilities.

Process



- External stakeholders willingness to provide input toward process improvements.
- Meeting permit reform act cycle time requirements.
- Improved responsiveness to customer inquiries because staff is cross trained on all license types.

Technology

- List of valid licensees and certificate holders available online.
- Databases in Microsoft Access developed for most process needs.
- Many licensing and certification forms available in PDF on the website.

8. Internet Access to Process

Information Now Available on the Internet:

- Summary of license types and requirements for some license types
- Knowledge expectations and study material list for PCA examination (by subcategory)
- Current examination results
- Examination schedule
- List of valid license and certificate holders (updated weekly)
- Continuing education class schedule (pending and approved)
- DPR contacts

Services Now Available on the Internet:

- None

Links Provided to Other Sites:

- California Department of Consumer Affairs, Structural Pest Control Board
- California Department of Health Services, Division of Communicable Disease
- University of California, Statewide Integrated Pest Management Project

9. Process Improvement Recommendations

P1. Determination of most efficient staffing assignment

Determine whether assigning staff to all license types is more efficient than assigning staff to one license type. The objectives are to decrease customer inquiry response time and reduce the time between preparing new or renewal applications and issuing a license or certificate. In 1998, the DPR required that individual staff process all license and certificate types. Formerly staff had specialized in one license type. This cross training was intended to reduce customer inquiry response time. Staff are assigned individual license/certificate holders by last name and businesses by the first letter of the business' name.

The DPR cannot clearly identify which of the two approaches is more beneficial to stakeholders. Staff has indicated anecdotally that customer complaints on responsiveness have increased following this process change. Part of the problem is that staff continues to route difficult questions or applications to the staff person formerly specializing in a license or certificate type, thus reducing the effectiveness of cross training. When a staff member is absent, the DPR also does not quickly assign work already in process to another staff member.

The DPR should focus this evaluation on benefits to stakeholders (e.g., responsiveness to customer inquiries). The DPR should rely heavily on stakeholder interviews.

P2. Staggered license renewals

Stagger license and certificate renewals throughout the year. The objectives are to reduce the time between preparing renewal applications and issuing a renewed license or certificate and free up staff resources during the end of the year for other more critical licensing and certification functions. Staff currently processes renewals for half of all licensees and certificate holders (approximately 14,000 renewals) between October and December of each year. Staggering renewals throughout the year would reduce staff stress levels caused by this end of year workload spike. Stakeholders support staggered renewals.

To stagger renewals, the DPR could shift the license or certificate expiration date from an expiration date at the end of the calendar year to variable expiration dates based on the first letter of the licensee or certificate holder's last name and businesses by the first letter of the business' name. If this is the option chosen, the DPR should determine how to group last names and business ' first letter of their businesses' first name, so that renewals are spread equally over each year. The DPR should determine the frequency of processing renewals, whether it is continuous, monthly, or quarterly. The DPR should determine the frequency of processing renewals, whether it is continuous, monthly, or quarterly.

For the initial staggered renewal period the DPR could prorate the continuing education requirement to reflect the period the license is valid. Once the renewal date is established, each licensee or certificate holder would simply continue to renew every other year on that same renewal date.

9. Process Improvement Recommendations *(continued)*

P3. Extension of renewal period to three years

Extend the current license and certificate renewal period from two years to three years. The objective is to reduce the number of renewals per year and reduce the number of renewal applications submitted by stakeholders. Extending the renewal period would spread the DPR's renewal workload across three years instead of two years. Stakeholders would pay a three -year versus two-year fee and would track three years versus two years of continuing education.

P4. Use of new embosser

Replace the old license and certificate card embosser with a new embosser already purchased by the DPR. The objective is to reduce the time and resources required to emboss a license or certificate card. The new embosser software can obtain data directly from the core database, thus eliminating office technician and office assistant data entry time of up to seven fields per card for 14,000 cards per year. The new embossing machine would automatically generate and emboss the license cards directly from the core database.

The DPR should determine why the new embossing machine is not currently operational (i.e., network connection, PC operating system, interface between computer and embosser, or embosser), fix any problems, and make the embosser operational. This DPR should coordinate this effort with licensing and certification staff, ITB staff, and a representative from the company who services the embosser.

P5. Improvement of performance measurement

Use existing performance measures with more precise cycle time definitions and data captured by the core database. The objective is to provide a means to accurately evaluate the process against a target or standard value. The definition of a business process, such as the licensing and certification process, is a set of activities that begin and end with a customer. Performance measures can, and should, measure the entire process. Performance measures should be regularly tracked, measured against, and reported to management. The performance measures the DPR should continue to track, but do so based upon accurate transaction information, include:

- ❑ Median cycle time from receipt of an application to issuance of a valid license or certificate
- ❑ Median cycle time from receipt of a renewal application to issuance of a valid license or certificate
- ❑ Median cycle time from receipt of a CE sponsorship request to approve to the day that the accredited class is posted to website.

9. Process Improvement Recommendations *(continued)*

P5. ***(continued)***

The DPR should also consider measuring the median cycle time from receipt of a new application for examination to notifying the applicant of a scheduled examination location.

The DPR should capture all data for the above performance measures (currently, the DPR does not capture all cycle time data for its permit reform act reporting). It also should clarify application or renewal cycle definitions (e.g., date received, date when the clock stops, date completed). The DPR should not collect and enter performance data on an ad hoc basis, but rather should update the capabilities of the core database to capture and report performance measures based on all valid transactions.

P6. Alternative proctoring methods

Evaluate alternative sources to proctor licensing and certificate examinations. The objectives are to reduce proctoring costs and redirect staff resources to other more critical licensing and certification functions. DPR staff proctors examinations throughout the state, though not legislatively required to do so.

The DPR should determine whether to continue to proctor examinations. Because proctoring is not required by statute, the DPR could consider alternative examination methods (see e-government solutions below for online examinations and examinations at remote kiosks). Frequently, one DPR staff may proctor examinations with up to 50 examinees (sometimes in remote and potentially unsafe areas). Staff indicates that the high ratio of examinees to proctors potentially limits the proctor's effectiveness (e.g., to enforce "no cheating" rules), meaning the DPR essentially does not proctor the exam.

If proctoring is desired, the DPR should evaluate whether to contract proctoring to:

- ❑ CACs
- ❑ Private sector firms (exclusively, or as support to DPR staff)
- ❑ Department of Motor Vehicles (may be very difficult, based on prior, failed attempts by another department to have the DMV proctor boat operator examinations)
- ❑ Other local governments.

The DPR should weigh the costs and benefits of each proctoring option. The DPR also may want to consider combinations of the above options. The DPR should assume that each alternative proctoring method should provide at least the current level of examination frequency and access.

9. Process Improvement Recommendations *(continued)*

P7. Use of new Scantron machine

Replace the old Scantron machine with a new Scantron machine already purchased by the DPR. The objective is to reduce resources required to score examinations. The new Scantron machine should allow staff to eliminate some manual steps (e.g., verifications of examinee information and visual checks of Scantron exams with results).

The DPR should determine why the new Scantron machine is not currently operational (e.g., network connection, software, or the machine), fix any problems, and make the machine operational.

P8. Staff participation in specific training

Provide licensing and certification staff with specific training to improve customer service. The objectives are to decrease customer inquiry response time and reduce customer complaints. Currently, staff has no formal written training plans with minimum education hours. The DPR should develop training plans for licensing and certification staff. The focus of the training should be in customer service, conflict resolution, communication skills, effective time management, computer skills, and writing skills. The DPR should regularly convey training availability about the above topic areas to staff.

The DPR should provide opportunities for staff mentoring and knowledge transfer on licensing and certification processes. The DPR also should continue to cross-train staff on how to process different license types.

Because staff interface often with DPR stakeholders and the public, the DPR should expand staff's understanding of other DPR processes. The DPR could accomplish this by providing training on department-wide functions and by involving staff more on department-wide projects.

P9. Updates to forms

Develop and implement a plan (tasks, resources, schedule, and responsibilities) to update applications and forms. The objectives are to reduce redundant and duplicative reporting required of stakeholders and reduce staff data entry. The DPR has potential opportunities to improve any of the nearly 70 existing licensing and certification forms.

The DPR should eliminate irrelevant and unused information in forms and remove information not required in statute or regulation. The DPR also should consolidate forms where possible. As an example, the DPR could collapse the response form letters used for QALs, QACs, and pilot applications from three forms to one form. The DPR also could consolidate all applicator applications into one form.

P10. Examination and study guide update

Update examinations and study guides to reflect current pesticide practices. The objectives are to reduce the number of violations of pesticide laws and reduce the number of DPR enforcement activities. The DPR has not updated examinations for overall content since 1985. Stakeholders have suggested examinations have lost relevance and should be updated. The DPR should prepare a plan with personnel, timelines, and completion dates to revise each of the nearly 40 examinations, as needed.

The DPR should update examinations to reflect:

- ❑ Changes in pesticide products
- ❑ Changes in application requirements
- ❑ New permit requirements (e.g., mitigation measures specific to a product and soil type)
- ❑ New environmental monitoring requirements
- ❑ New surface water, ground water, and air quality standards
- ❑ Recent U.S. EPA decisions
- ❑ Changes to laws and regulations.

The DPR should develop a process to update examinations at least every three to five years. The DPR should form an examination committee that includes the University of California Statewide Integrated Pest Management Project (UC IPM) and other stakeholders. The DPR should evaluate a recent proposal from UC IPM to assist in updating examinations and study guides (for $115,000 per year).

Where possible, the DPR should focus examination updates on known applicator weaknesses. To identify weaknesses, the DPR could compare violations (from the enforcement and compliance action tracking database) with missed examination questions (from the exams database). The DPR also could use previous examination results to identify common missed questions requiring update or revision.

The DPR also may want to consider the following improvements:

- ❑ Require the laws and regulations examination as a prerequisite to a category examination
- ❑ Eliminate laws and regulations questions included in a category examination
- ❑ Remove questions from a category exam containing duplicative laws and regulations content
- ❑ Add an "environmental" category examination. This may require U.S. EPA approval.
- ❑ Create subcategory examinations to focus an applicant's study on content more relevant to his/her field. The authority to do this is in regulation. However, this may require U.S. EPA approval.

The DPR should keep updated on the collaborative effort between the U.S. EPA and the Canada Pest Management Regulatory Agency to develop a new core principles examination for pesticide applicators (see www.epa.gov/pesticides/safety/applicators/applicators.htm).

9. Process Improvement Recommendations *(continued)*

P11. Comparison of noncompliance with examination results and continuous education courses

Periodically compare license and certificate holder violations with examination results and continuous education courses taken. The objectives are to reduce the number of repeat violations of pesticide laws and reduce the number of DPR enforcement activities. The DPR should periodically assess whether noncompliance relates to examination questions missed or to those repeatedly taking continuing education courses outside one's field. The DPR could use this information to suggest areas of future study for license and certificate holders who violate pesticide laws. The DPR also could use this information to update examinations and study guides.

P12. Other improvements

- ❑ Develop an automated voice response system to direct callers to appropriate staff or website location. The DPR could use voice messages to answer questions to current questions.
- ❑ Create one full time customer service staff position to handle a majority of telephone inquiries, so staff don't spend up to 40 percent of their time answering telephone calls.
- ❑ Use a common set of responses to frequently asked questions. The objective is to reduce stakeholders complaints related to receiving conflicting information. Staff should provide the same answer to the same question.
- ❑ Consider reexaminations of existing license and certificate holders upon an identified misuse or violation.
- ❑ Create a more linear rate structure where fees for each additional examination category are the same (this may require a legislative change).

EG1. Online license renewal

Allow license and certificate holders to renew licenses and certificates online. The objective is to reduce the time between preparing renewal applications and issuing a renewed license or certificate. One of the most important requirements of stakeholders is for DPR to issue a license or certificate in a timely manner.

The DPR could initiate the renewal process by e-mailing a reminder to the license or certificate holder that it is time to renew their license, providing a direct hyperlink to DPR's online license and certificate renewal site. The renewal site would allow a license or certificate holder to log in, view and update contact information, view current licenses and certificates held, indicate those licenses and certificates that are to be renewed and those that are not, calculate the total fee, and pay the fee. If required for that renewal, the form would require the applicant to enter continuing education course names, numbers, dates, and hours. The DPR could send a second e-mail to the license or certificate holder to confirm the transaction and payment amount, provide a transaction code, and deliver the license for printing locally. The DPR then would mail to the licensee a copy of the embossed license or certificate card.

Most current renewal requirements are fairly simple, requiring only a returned, pre-preprinted form and payment from the license and certificate holder. The DPR should eliminate the requirement for an apprentice or journeyman pilot to include a copy of a valid medical certificate card issued by the FAA with each renewal. Instead the DPR should require the apprentice or journeyman pilot to provide the current expiration date of the medical certificate card and swear to the validity of the information provided, just as the applicant now does with all other information provided on the renewal form.

The DPR should identify best practices and lessons learned from the State of California's registered nurse online license renewal pilot project. Recently, this pilot has processed a small number of renewals online, and is the first such online license renewal site that the State offers. The site requires a licensee to enter a user id number and password, payment information (i.e., credit card number and expiration date), and continuing education information.

EG2. Submission of continuing education sponsorship application online

Allow users to complete and submit continuing education sponsorship requests online. The objectives are to reduce the time between preparing a CE sponsorship application and accrediting a course. Stakeholders have requested that the DPR provide an online CE sponsorship application. Sponsors could more quickly submit a complete and correct application form. Such a form would reduce DPR resources needed to file and route hardcopies, and populate the CE database.

EG2. ***(continued)***

One issue that must be addressed with an online CE sponsorship request form is ensuring that information submitted with the application is uniquely linked to that application (e.g., a unique identifying code assigned at time of online submission). The DPR also would need to create a standard for the course outline and course description (e.g., specify program and format).

EG3. Online application

Allow applicants to complete and submit a license and certificate application form online. The objectives are to reduce the time between preparing applications and issuing a license or certificate and reduce DPR resources needed to file and route hardcopies, populate DPR databases, and receive, record, route, and deposit payments. One of the most important requirements of stakeholders is for DPR to issue a license or certificate in a timely manner. Stakeholders have indicated an interest in an online license and certificate application.

The DPR's online license and certificate application site would allow an applicant to initially enter contact information, enter required license/certificate holder information, and pay fees. Individuals could identify an examination location preference and the DPR could respond by e-mail confirming the examination location.

Potential capabilities of the online form could include:

- ❑ Ensure required fields are completed
- ❑ Request only the information needed, based on the type of submission
- ❑ Respond promptly to applicants by e-mail noting application deficiencies
- ❑ Accept payment
- ❑ Populate existing DPR databases
- ❑ Route the form to appropriate licensing and certification staff for review and approval
- ❑ Automatically schedule examinations
- ❑ Automatically generate examination reminder notices
- ❑ Provide an e-mail notification when applicant passes examination (using link to exams database).

The DPR could send an e-mail to the applicant to confirm the transaction and payment amount, provide a transaction code, and deliver the license for printing locally. The DPR then would mail a copy of the embossed license or certificate card.

EG4. Evaluation of online examination

Evaluate whether to allow applicants to take licensing and certification examinations online. The objective is to determine the feasibility of online examination. Benefits of online examination include increased access to examinations and reduced time from notifying an applicant of an examination location to notifying an applicant of examination results.

If the DPR determines proctoring is not required, applicants could have 24/7 access to examinations online. Because the DPR could deploy software to score examinations automatically, applicants could receive results immediately online and DPR could issue a license or certificate faster.

Potential capabilities of online examinations include:

- ❑ Rotate a bank of examination questions
- ❑ Populate existing exam database
- ❑ Eliminate manual components of current examination process (e.g., manually sorting Scantron forms, feeding forms into machine, and compiling test results)
- ❑ Automatically score examinations
- ❑ Reduce examination time by automatically determining pass/fail based on the remaining number of questions
- ❑ Provide quick "profiling" of examination results by providing target areas for future study and guidance on any weaknesses. Profiling is currently a manual process that can take as long as one month to prepare per test. Profiling can be an effective tool to identify applicators gaps in knowledge.

An online examination would not require a change in the process of reviewing a license or certificate application.

If the DPR determines proctoring is required, the DPR may want to consider providing proctored online examinations at identified locations throughout the State (most likely using alternative proctoring methods identified in process improvement P6 above).

The DPR should evaluate State of California Personnel Board safeguards for protecting the integrity of examinations provided online for State civil service (e.g., warnings).

EG5. Evaluation of remote kiosks for examinations

Evaluate whether to develop remote kiosks that applicants can use to take licensing and certification examinations. The objective is to determine the feasibility of developing and using kiosks. Benefits of kiosks include increased access to examinations and reduced time from notifying an applicant of an examination location to notifying an applicant of examination results.

If the DPR determines proctoring is not required, applicants could have improved access to examinations at remote kiosks. Because the DPR could develop software to score examinations automatically, applicants could receive results immediately at the kiosk and DPR could issue a license or certificate faster.

The DPR should review the State of Virginia's automated testing system for pesticide applicators. This system provides 6 day per week access at over 70 DMV locations throughout the State (proctored by DMV staff). Nearly 90 percent of those taking examinations use the system. System features include:

- ❑ Rotating a bank of examination questions
- ❑ Reducing examination time by automatically determining pass/fail based on remaining number of questions
- ❑ Using a touch screen rather than a keyboard
- ❑ Including enhanced color graphics and pictures (e.g., for identifying pests)
- ❑ Automating line-item analysis of examination results.

If the DPR determines proctoring is required, the DPR should consider providing proctored examinations using kiosks at locations throughout the State (most likely using alternative proctoring methods identified in process improvement number P6, presented earlier).

EG6. Access to study guides and materials

Improve stakeholder access to study guides and materials (including text books) needed for examinations. The objective is to reduce stakeholder inquiries regarding study guides and materials.

The DPR should clearly identify all study guides and materials recommended for each examination type on the website. The DPR should provide stakeholders the ability to download those free study guides and materials (10 study guides are offered at no charge). For the remaining study guides and materials, the DPR should provide a description and ordering information (including contact information, ordering instructions, fees, and, if available, a hyperlink to the associated website).

EG7. Increased licensing and certification information online

Provide Internet access to materials that will help stakeholders through all aspects of licensing and certification. The objectives are to reduce the proportion of applications and renewals that are returned because of deficiencies and decrease telephone call volume. Additional information online could include:

- *Single point of access* – a linkage to the following for each license type: (1) knowledge requirements, (2) examination contents, (3) study guides/materials, (4) related CE courses, and (5) other requirements. The DPR should maintain an updated list (with website locations) of study materials.
- *Graphical flow diagram* – a graphical flowchart identifying license/certificate requirements based on applicant needs.
- *Renewal information* – an easy to understand matrix of license fee and renewal requirements based on odd-even year and last name (A-L and M-Z) criteria.
- *Answers to frequently asked questions (FAQ)* – attempts to answer questions that new licensees often ask. This could include responses to questions on minimum application requirements, minimum knowledge expectations, and minimum cycle time requirements (as identified in the permit reform act). Accuracy of the information is greatly assisted by its frequent exposure to criticism by an interested, and occasionally well-informed, audience.
- *Online forum* – a forum with treaded discussions to keep license and certificate holders informed of updates to applications, forms, and requirements. It can include the latest news on the subject, a conferencing capability for questions and answers by participants, as well as files for downloading samples and other related material. The DPR could convey the potential environmental and human health benefits gained through an applicator's increased knowledge and competence. The DPR could emphasize that the licensing and certification program is the primary risk mitigation mechanism for the pesticide regulatory program. The DPR also could periodically identify program highlights.
- *E-mail notification* – automatic e-mail notification (though a "listserv" capability) providing new information or updates about relevant licensing and certification topics.
- *Online links* – relevant links to licensing and certification agencies and committees, if available, including the American Association of Pesticide Safety Educators, USDA Tri Agency, Certification & Training Assessment Group (CTAG), and the Agricultural Pest Control Advisory Committee (APCAC).

EG7. ***(continued)***

The DPR should provide key word search capabilities to online for licensing and certification information. Doing so could reduce telephone inquiries of staff and decrease customer service time (by providing staff faster access to information). Examples where information is not currently searchable include:

- ❑ The continuing education course schedule (only available by period)
- ❑ The list of valid licensees and certificate holders
- ❑ The list of examination results (only available by location, by application number)
- ❑ The list of enforcement letters (only available by date)
- ❑ The glossary of pesticide terms (English to Spanish).

EG8. Additional information to internal staff

Provide Intranet access to materials that will help DPR provide stakeholders with improved customer service, including online access to improved listing of licensees and certificate holders. The objectives are to reduce the time required by staff to respond to customer inquiries and reduce ad hoc requests for information from other business processes.

DPR staff only has access to licensing and certification information via the Internet. Staff do not have Intranet access to any relevant databases, licensing statutes and regulations, procedures, weekly reports, or exam schedules.

Intranet information could include:

- ❑ Access to databases - read-only access to current licensing and certification Microsoft Access databases. As an example, mill assessment staff and audit branch staff should be provided access to dealer and broker mailing information. The DPR also should consider providing historical licensing and certification data (the DPR could determine the number of years). Audit staff has indicated they cannot determine the number of dealers and brokers licensed each year from 1995 to the present.

The DPR should solicit direct feedback from enforcement and registration staff on needed linkages to the licensing and certification databases and allow them appropriate access to the following:

- ❑ *User manual* - a completed users manual with policies and procedures to assist staff (currently in process).
- ❑ *Weekly report archives* - a location to post and archive the weekly reports currently prepared by licensing and certification staff. Weekly reports identify consistent problems and issues with licensing and certification. The DPR should archive these reports and make them searchable for quick reference.
- ❑ *Proctoring checklist* - a checklist of all tasks required to proctor examinations.

EG9. Bar code licenses and certificates

Evaluate bar coding licenses and certificates for greater access to current licensing and certification information. The objective is to determine the feasibility of bar coding each license and certificate. Benefits include improved access to license and certificate holder information in the field. Enforcement staff suggests they cannot quickly assess information from a current licensee or certificate holder. The DPR could benefit from providing a bar code on each license or certificate so that enforcement staff could scan a license and identify current information. The DPR could link the following information to the bar code:

- ❑ Valid license or certificate identification number
- ❑ Valid license or certificate categories
- ❑ Renewal status
- ❑ Violation history.

EG10. Other candidates

- ❑ Allow stakeholders to view a version of the current licensee and certificate holder database directly on the screen. The objective is to reduce access time to current license and certificate holder information. Currently, stakeholders download a PDF file that contains a list of all individual licensees and certificate holders for a given first letter of the last name or the first letter of a business' name.
- ❑ For each continuing education course, identify a contact person, telephone number, and/or e-mail address.
- ❑ Provide CACs with extranet[1] access to more specific licensee information than is provided on DPR's website. The DPR also should provide CACs access to electronic versions of licensing and certification forms they use (e.g., DPR license applications submitted to CACs).
- ❑ Regularly update a "sponsor notice" that describes minimum requirements of the continuing education course sponsor. The DPR should post this to the website.
- ❑ Provide a header on every page of any document provided on the website, noting at least the document title, date, and column headings.

[1] A website for existing customers rather than the general public. It can provide access to internal research, internal databases, and virtually any information that is confidential and not published for everyone. An extranet uses the public Internet as its transmission system, but requires passwords to gain access.

EG10. ***(continued)***

- ❑ Provide an instruction to inform users that they can find information on any web object (e.g., a PDF or an HTML page) using the "control-f" key.
- ❑ Provide more prompts on the website to ask questions of staff and seek help.
- ❑ Evaluate whether to use a 24-hour access number to identify whether a license or certificate is valid. The objective is to decrease the time required to determine whether a license or certificate is valid. The user could state the license or certificate number and the DPR could set up the voice system to respond with a valid through date. This interactive voice response system would allow licensees to use the phone to determine license status.
- ❑ Post on the website meeting minutes and process improvements suggested by Agricultural Pest Control Advisory Committee.

11. Information Technology Improvements

IT1. Improved integrity of core database

Correct documented problems with the licensing and certification core database. The objective is to reduce errors in licensing and certification information provided to stakeholders. Staff has indicated that the core database contains problems (e.g., incorrect formulas used for dates and lack of 1998 renewal data). Staff estimated that minimal resources are required to fix problems with core database. The DPR should identify problems with the database and then make any programming changes or modifications to eliminate these problems.

The DPR also will require accurate licensee and certificate holder information from core for the notice of intent to operate system (currently in the development stages). In the future, to generate new license and certificate cards, the new embosser software also will need to read accurate data from core.

IT2. Documentation of all licensing and certification databases

Prepare system and user documentation of applications and databases. The objective is to allow efficient maintenance and use of DPR's databases.

The DPR should prepare some minimal level of the following:

- ❑ Operating procedures (instructions to enter data and distribute reports; description of error messages; and defaults taken by system with instruction on how to change them)
- ❑ System documentation (data dictionary, system flow chart, application program documentation, and configuration diagram)
- ❑ Technical documentation (file structures and access methods, program flow charts, and source code).

IT3. Improvement of permit reform act reporting

Use the core database and the statistics databases to capture permit reform act cycle time data and prepare required reports. The objectives are to reduce the amount of resources required to prepare permit reform cycle time reports and increase the accuracy of this reporting. Currently an individual collects data from staff and enters this data into a Microsoft Excel spreadsheet.

The DPR should establish clearly written definitions for beginning and end dates used to determine the cycle time calculation for permit reform act reporting. The DPR then should incorporate this logic into the core database and train staff to enter the data for each application or renewal.

The DPR also should assure that all relevant cycle time data is included in the reports.

IT4. Automatic correspondence generation

Create the capability to automatically print various letters from existing licensing and certification databases. The objective is to reduce the time required to process applications and renewals. The DPR should modify processes and current systems to automatically generate and print the following after databases are populated with all necessary information:

- ❑ Renewal notices
- ❑ Insurance expiration letters
- ❑ Problem notification letters
- ❑ Examination reminder notices
- ❑ Examination result letters
- ❑ Letters accompanying license and certificate cards.

The DPR should develop the capability to e-mail ("listserv") these letters.

IT5. Other improvements

- ❑ Add logic in exams database to automatically schedule examinations, replacing the current need to manually schedule exams.
- ❑ Use auto-numbering function in the continuing education database to generate continuing education course numbers.
- ❑ Define "license" versus "certificate" and provide definitions on website.
- ❑ Replace triplicate versions of each of the five problem notification letters with electronic versions on the Intranet.
- ❑ Do not mail a hard copy of each CE sponsorship request to CECPM and to CAAA. Instead, e-mail to these associations each day a download from the continuing education database that notes new CE courses.
- ❑ Encourage staff to use e-mail to communicate internally.

Permitting and Enforcement Process

Process Description

- The DPR implemented its original *State Prioritization Plan for Pesticide Use Enforcement Activities* in 1995. The DPR updated the plan in 2000. The DPR updates this prioritization plan periodically based on new information (e.g., from compliance assessment program results, pesticide illness surveillance program reporting, and regulatory activities reporting). The plan provides CACs with priority DPR initiatives and activities that address compliance improvement, program implementation, and program development and emerging issues.

- The DPR funds each CAC to enforce pesticide laws and regulations in their respective counties through restricted materials contracts and mill assessment disbursements. Of the 17.5 mills the DPR collects, the DPR pays 6 mills to the CACs. The DPR funds a CAC based on that CACs individual costs and individual workload in proportion to the total costs and total workload of all CACs collectively (the allocation formula is provided in the table on this page).

- Annually, the DPR prepares a negotiated work plan with each CAC.[1] The work plan incorporates elements of the State prioritization plan and the CAC's prior year regulatory activities summary report. In the work plan, a CAC identifies activities to address county-specific priority issues based on available resources. To address a priority issue, a CAC may specify targeted inspection activities, staff training and development, outreach, policy review, database improvement, research projects, and deliverables and time frames.

Method for Allocating Funds to CACs
(as of March 1, 2001)

Criteria	Percent of Allocation
Number of inspections [a]	15%
Number of licensed dealers, PCAs, businesses, pilots, and farm labor contractors registered; structural pest control operators providing notice of work; active operator ids; and similar workload activities	3%
Number of private applicator certificate holders certified	3%
Work hours expended on pesticide-related activities	30%
Expenditures for pesticide-related activities	28%
Pounds of pesticide used	2%
PUR data records submitted	4%
Number of RMP/amendments issued; sites identified on RMPs/amendments; and NOIs reviewed [b]	7%
Pesticide investigation reports [a]	3%
Noncompliances documented during inspections	2%
Focused pesticide activities [a]	3%
Total	**100%**

a) In accordance with the prioritization plan and agreed upon in negotiated workplan.
b) RMP: restricted material permit.

[1] A DPR liaison and the CAC "negotiate" the contents of the work plan.

Process Description *(continued)*

- The DPR prepares a mid-year and an end-of-year effectiveness evaluation for each CAC. The effectiveness evaluation is a 14-page worksheet that primarily captures CAC enforcement performance. The DPR may adjust a CAC's funding based on effectiveness evaluation results (typically an insignificant adjustment).

- The DPR conducts the marketplace surveillance program. The DPR's staff sample produce from various channels of trade (e.g., seaports, packing sites, and wholesale and retail outlets). The California Department of Food and Agriculture (CDFA) laboratories analyze samples to identify: (1) residues of pesticides unauthorized for a commodity (i.e., illegal residues) or (2) residues above established tolerance levels.[2] The DPR summarizes program results in the Residues in Fresh Produce Report.

- The DPR conducts the product compliance program. The DPR's staff conducts approximately 750 inspections per year at retail locations throughout the state. The DPR monitors pesticide products to determine whether they are currently registered. The DPR's regional staff contacts the DPR Pesticide Registration Branch, Label Resource Center to verify product registration status (registration staff may review the registered product label). The DPR collects about 80 product samples per year that the CDFA laboratory analyzes to determine if the product has been adulterated or misbranded.

- The DPR and CACs investigate incidents of pesticide misuse. The DPR typically develops an investigation plan, conducts a site visit (as needed), collects evidence, and prepares a case file.

- The DPR recently expanded its authority to impose administrative civil penalties for pesticide misuse violations.

- Staff review and comment on CAC notice of proposed actions (NOPAs) for administrative civil penalties.

[2] The DPR adopted the U.S. EPA's residue tolerance levels for each pesticide product.

Process Description *(continued)*

- The DPR provides outreach to inform stakeholders of current DPR policies and procedures. The DPR's outreach primarily includes presentations at industry group meetings and collaboration with public entities (e.g., health departments and universities).

- The DPR prepares routine correspondence to advise CACs and other stakeholders of DPR policies and procedures.

- The DPR provides training to CAC staff. The DPR has developed approximately 30 training packages. Annually the DPR trains CACs on up to three of these packages. Sample training topics include: investigative techniques, permit issuance, and administrative hearings.

- The CACs submit the following pesticide regulatory activities data monthly to the DPR:
  - Pesticide use monitoring inspections
  - Pest control records inspections
  - Structural pest control use and records inspections
  - Restricted material permits reviewed and issued
  - Investigations
  - Private applicators certified
  - Number of people provided training and outreach
  - Compliance actions
  - Enforcement actions.

- The DPR prepares the annual pesticide regulatory activities summary report that summarizes all CAC activities. The DPR uses data from this report to allocate mill funds to CACs.

Recent Improvements

- In 2001, the DPR completed the enforcement and compliance action module for the enforcement and compliance action tracking database. For each incident, a CAC completes a pesticide enforcement/compliance action summary form (including enforcement action type and status, action detail, individual/business information, and activity/incident information). The CACs submit and the DPR enters data from the form into the enforcement and compliance action tracking database. The DPR intends to add an inspection forms module to the database in 2001 and later add a compliance assessment and complaints module.
- On September 25, 2000, the DPR established a new pesticide drift incident response policy (ENF 2000-034). The objective of this policy is to eliminate CAC confusion on drift investigation responsibilities. The policy replaced previous DPR policies on drift investigation. By citing specific authorities, the DPR strengthens drift enforcement guidelines and provides staff greater capability to enforce the drift policy with CACs.
- In 2000, the DPR combined the market place program (6,000 samples) and the priority pesticide program (1,500 samples) to increase efficiencies of sample analyses from both programs (formerly a second laboratory analyzed pesticide program samples).
- In 2000, the DPR completed collecting data for the compliance assessment report. DPR is in the process of finalizing the compliance assessment report. The goal of the compliance assessment was to identify the programs' strengths, weaknesses, and potential program improvements based on actual data. The DPR has used compliance assessment results to develop plans with selected CACs to implement program improvements.
- During fiscal year 2000/01, the regional office (RO) staff began working in teams of two (one liaison lead person and one evaluation lead person) to conduct effectiveness evaluations of CACs with the primary objective of increasing evaluation objectivity.
- Effective January 1, 2001, the Legislature gave the DPR's director authority to impose administrative civil penalties for pesticide misuse up to $5,000 per violation.

Planned Improvements

- In November 1999, the DPR completed a draft document titled, *Enforcement Initiative - Proposals to Improve Enforcement of California's Pesticide Regulatory Program*. This document identifies nearly 100 recommendations in areas of multi-jurisdictional challenges, enforcement tools, funding, technology, customer service, performance standards, program evaluation, labels, permits, and regulations, and worker protection. In March 2000, the DPR developed an implementation plan.

3. Process Overview

Inputs

CACs

- ❑ Pesticide regulatory activities summaries (required monthly)
- ❑ Enforcement actions
- ❑ Request for policy/ procedure interpretation

DPR

- ❑ Product label database
- ❑ Data files and product file circulation database
- ❑ List of current licensees and certificate holders

Others

- ❑ USEPA request for inspection/investigation
- ❑ Written, faxed, telephoned, or e-mailed complaint or request

Process

Enforcement Planning

DPR

- ❑ Use USEPA guidelines for Cooperative Agreement and state/county generated data to develop a state prioritization plan for enforcement activities
- ❑ Develop with each CAC a negotiated work plan specifying targeted enforcement areas and fulfill obligations in law/regulation/policy
- ❑ Complete an effectiveness evaluation of each CAC's efforts to meet its work plan
- ❑ Provide CACs enforcement training and technology support
- ❑ Conduct outreach to stakeholders

Enforcement Activities

CACs

- ❑ Conduct various enforcement-related tasks
- ❑ Provide training and outreach
- ❑ Initiate enforcement actions (e.g., fine pesticide users for violations)
- ❑ Conduct inspections and investigations

DPR

- ❑ Conduct inspections and investigations
- ❑ Investigate some pesticide use complaints
- ❑ Initiate enforcement actions with CACs (e.g., suspend/revoke license). Initiate criminal/civil actions (through Attorney General). Impose administrative civil penalties consistent with FAC 12999.6 (e.g., users of pesticides in some scenarios)
- ❑ Collect and analyze crop and produce samples for residue
- ❑ Analyze product compliance and monitor product registration
- ❑ Review air, ground water, and surface water data to identify mitigation measures for restricted material permits or for new regulations

Performance Measures

- ❑ None

Outputs

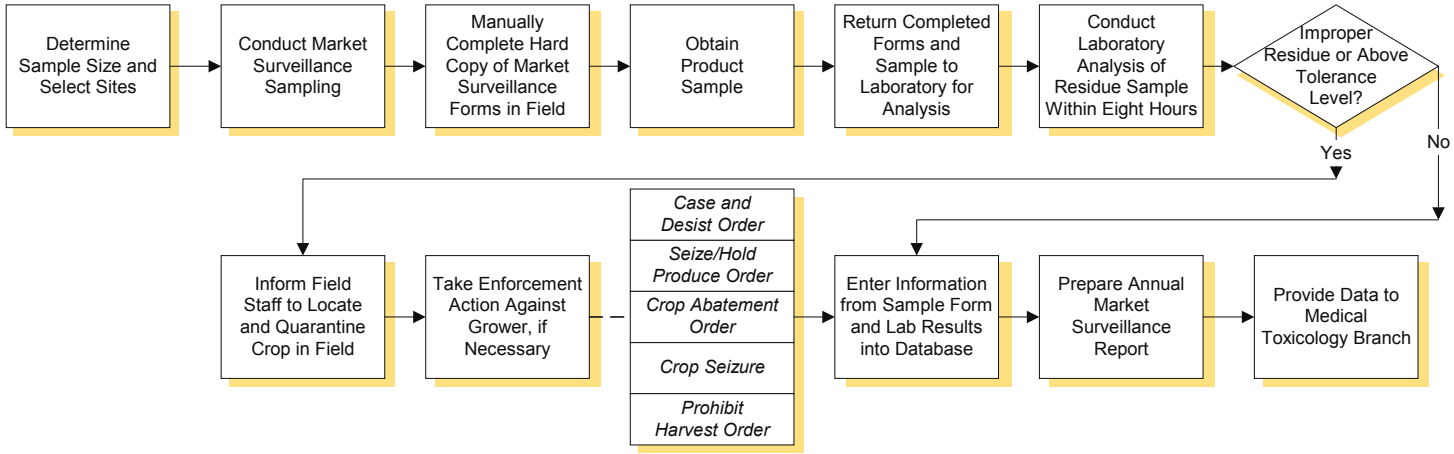
DPR

- ❑ County activity prioritization plan
- ❑ Negotiated work plan with CAC
- ❑ Effectiveness evaluation of CAC
- ❑ Routine policies/procedures correspondence
- ❑ Enforcement letters
- ❑ CAC staff training
- ❑ Annual pesticide regulatory activities summary report
- ❑ Inspection (e.g., for USEPA)
- ❑ Mill disbursement
- ❑ Investigation
  - ◆ Case file
  - ◆ Status reports
  - ◆ Closing report for illegal residue cases
- ❑ Mitigation measures
- ❑ Proposed legislation and regulations
- ❑ Marketplace surveillance report
- ❑ Compliance assessment
- ❑ Updates to the following databases:
  - ◆ Pesticide residue
  - ◆ Product compliance
  - ◆ Enforcement and compliance action tracking
  - ◆ Regulatory activities

4. Process Workflow

Effectiveness Evaluation

Market Surveillance Program (MSP)

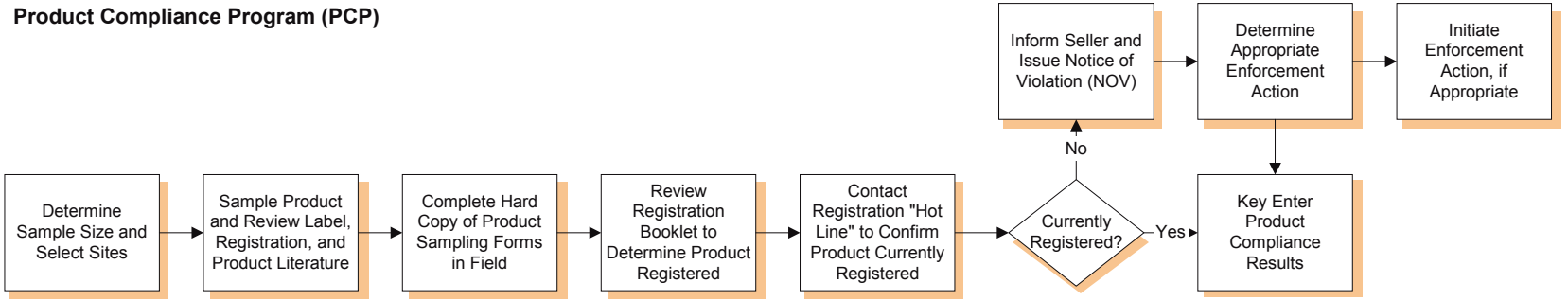


Primary databases updated during process:

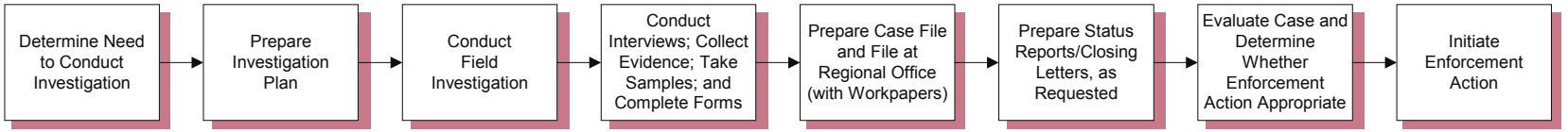
- Pesticide residue
- Product compliance
- Enforcement and compliance action tracking
- Regulatory activities

4. Process Workflow *(continued)*

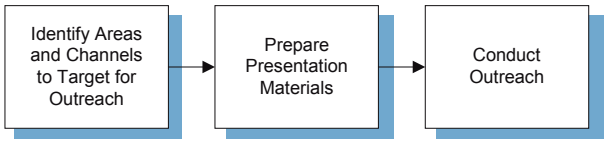
Product Compliance Program (PCP)



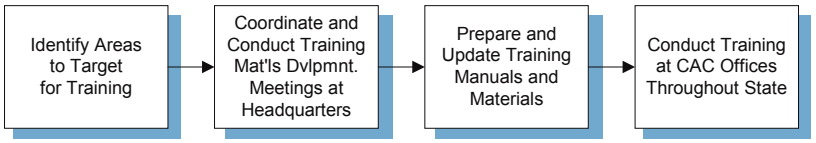
Investigations



Outreach



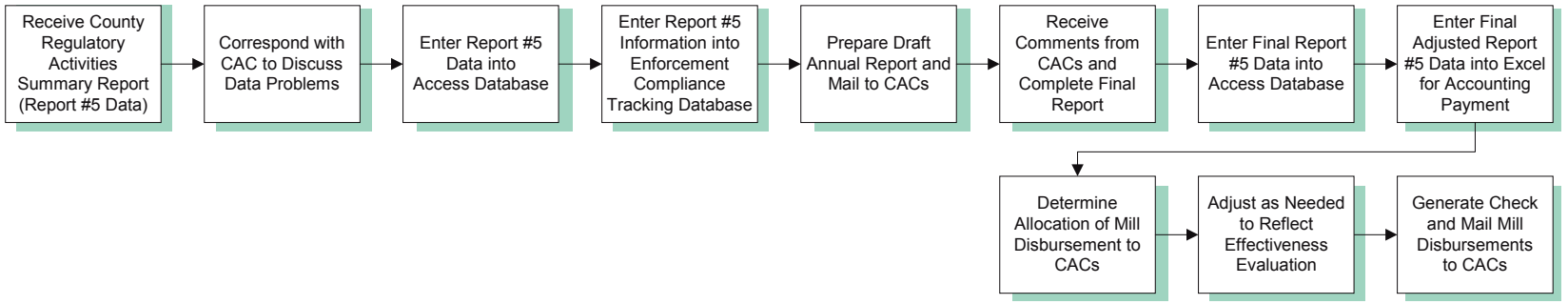
Training



Primary databases updated during process:

- Pesticide residue
- Product compliance
- Enforcement and compliance action tracking
- Regulatory activities

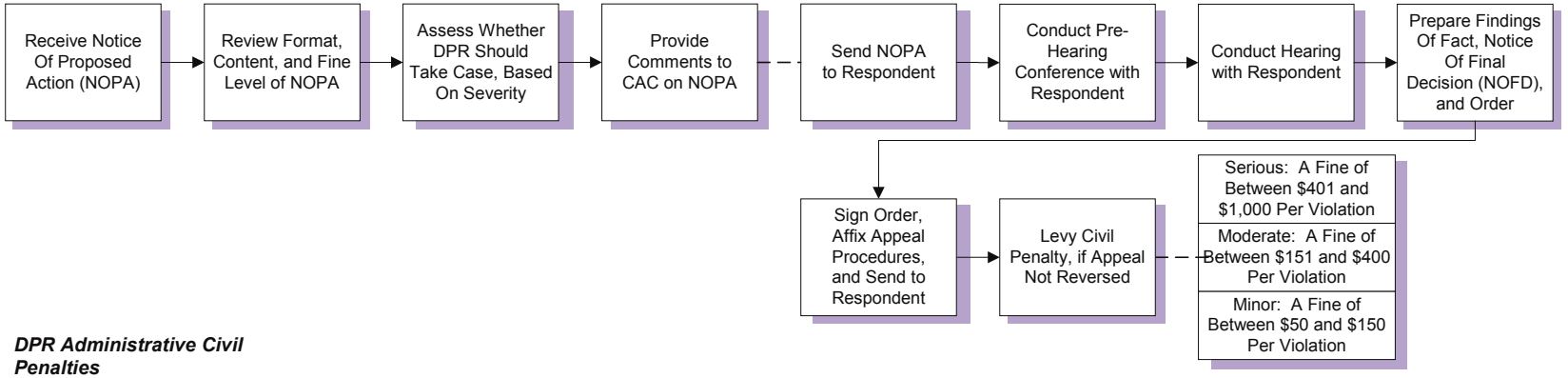
Regulatory Activities Summary Reporting



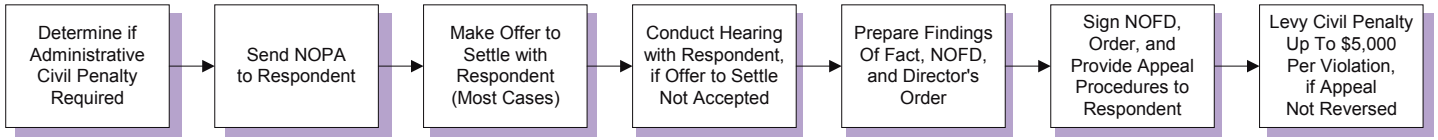
Enforcement Actions*

County Administrative Civil Penalties - DPR Review of NOPA

County Administrative Civil Penalty Process



DPR Administrative Civil Penalties



Primary databases updated during process:

- Pesticide residue
- Product compliance
- Enforcement and compliance action tracking
- Regulatory activities

* In addition, DPR may initiate civil and criminal actions (through the Office of the Attorney General) and CACs may initiate civil and criminal actions (through their city or county district attorney). The DPR may initiate an administrative action to refuse, revoke, or suspend a license and certificate it issued while a CAC may initiate an administrative action to refuse, revoke, or suspend a registration it issued.

Workload

100	Policy/procedure letters prepared and provided to CACs per year
400	Compliance related inspections per year
80	Compliance related inspections resulting in violation per year
80	Physical products sampled for product compliance program per year
550	Product related inspections for product compliance program per year
200	Overview or "use" inspections for product compliance program per year
5	Time (in hours) per product compliance inspection
6-7	Compliance assessments of CACs per year
250	Field overviews of CAC pesticide application and field worker inspection activities
50	CAC training sessions per year
8,000	Market surveillance samples per year
600	NOPAs reviewed per year
90	Civil penalty cases per year for sale of unregistered and misbranded pesticides

Enforcement Activities

Conducted by County Agricultural Commissioners

Activity	Fiscal Year 1997/98	Fiscal Year 1999/00	Percent Change 97/98-99/00
Use inspections	45,829	45,511	-1%
Records inspections	14,504	13,188	-9%
Investigations	2,140	1,812	-15%
Noncompliances identified	11,220	11,322	1%
Compliance/enforcement actions	6,717	5,937	-12%
Permits reviewed	48,909	41,443	-15%
NOIs reviewed	217,106	194,398	-10%
Private applicators certified/licensed	19,433	10,215	-47%
People provided training or outreach	33,912	32,611	-4%

6. Stakeholder Information and Service Needs

Information Needs

- Policy/Procedure Letters (by requested topic)
- Timely response to timely inquiry on investigation
- Investigation case files and original decisions
- Pesticide residue data
- List of pesticide residue tolerance levels by commodity
- Information on a DPR or CAC enforcement action (who, what, when, where, and why)
- Violation history of a licensee or certificate holder
- Interpretation of label requirements
- Negotiated work plans
- Communication to the public on real pesticide risks, safeguards, and the regulatory process (using non-scientific language)
- Written response (with links to applicable policy/ procedure letters) to enforcement questions

Service Needs

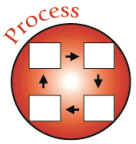
- Timely completion of a DPR inspection for U.S. EPA
- Timely completion of an investigation
- Standardized training to CACs on new laws, regulations, and DPR policies
- Electronic submission of CAC regulatory activities data

7. Strengths

People

- Extensive use of work groups (e.g., residue work group, training liaison committee).
- CACs' local knowledge of county sensitive areas and issues.
- Recent collaborative effort between DPR headquarters, ROs, and CACs to develop the *Enforcement Initiative*.

Process



- Providing pesticide residue data to the Medical Toxicology Branch.
- Low levels of illegal residue and products with residues over tolerance level (one percent).
- Very high product label compliance for non-chlorine products (less than one percent have an adulterated or misbranded label).
- Legislative and regulatory authority to appropriately discipline violators.

Technology

- Recently implemented enforcement and compliance action tracking database.
- Extensive history of pesticide residue data.

8. Internet Access to Process

Information Now Available on the Internet:

- State Prioritization Plan for Pesticide Use Enforcement Activities
- Sample negotiated work plan
- *Enforcement Initiative – Proposals to Improve Enforcement of California's Pesticide Regulatory Program* and implementation plan
- Residues in fresh produce reports (1995 to 1997)
- CAC administrative civil penalty reports (1996/97)
- Pesticide regulatory activities summary report (1998/99)
- List of CAC names and addresses
- Policy/Procedures Letters (2000 to 2001, though not all have attachments)
- Procedural Guidance Manual for Pesticide Enforcement Personnel

Services Now Available on the Internet:

- None

Links Provided to Other Sites:

- California Department of Consumer Affairs, Structural Pest Control Board

9. Process Improvement Recommendations

P1. Project plan for Enforcement Initiative	Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to implement the *Enforcement Initiative*. The objective is to reduce the risk of failing to implement the planned improvement recommendations identified in the enforcement initiative. The DPR should identify the general scope, costs, PYs, skill sets, and schedule needed for each enforcement recommendation. The project plan should include a feasibility study report(s) for any information technology recommendations that is not done with current resources. The project sponsor should present each project plan to an investment review council (e.g., as recommended in the readiness assessment report). The review council would prioritize and select the projects to implement.
P2. Creation of enforcement audit group	Evaluate whether to create an enforcement audit group within enforcement to conduct independent effectiveness evaluations of all CACs, rather than have regional office staff evaluate CACs in their region. The objectives are to determine whether an enforcement audit group could increase CAC compliance with negotiated work plans and free up regional office staff to perform enforcement activities in their region. The DPR should evaluate whether an enforcement audit group could reduce problems created by regional office staff who must conduct effectiveness evaluations of a CAC and also rely on that CAC for the CACs knowledge and access resources within a county.
P3. Allocation of mill to CACs based on performance	Evaluate whether to develop a formula for allocating the mill to CACs that is tied more closely to performance. The objective is to determine whether DPR could develop a formula for allocating the mill that could increase compliance with negotiated work plans. The DPR should determine how to better tie CAC performance with compensation (possibly documented in the new effectiveness evaluation that is planned by the DPR).
P4. Performance measures	Adopt performance measures for the permitting and enforcement process. The objective is to provide a means to evaluate the process against a target or standard value. The definition of a business process is a set of activities that begin and end with a customer. Performance measures can, and should, measure the entire process. Performance measures should be regularly tracked, measured against, and reported to management.

P4. ***(continued)***

Four suggested measures are:

- ❑ Statewide compliance with pesticide laws and regulations (measured as the percentage of the regulated population not issued a compliance or enforcement action)
- ❑ Worker safety illnesses (measured as the percentage of workers reporting an illness)
- ❑ Environmental contamination incidents (measured as the number of incidents per year)
- ❑ Median cycle time to respond to U.S. EPA requests for an inspection (measured from the date that the U.S. EPA requests an inspection to the date that the DPR provides the U.S. EPA with an inspection report).

P5. Improvement of case file organization and access

Develop standards for managing investigation cases. The objectives are to reduce the time to respond to stakeholder inquiries on a case and increase the number of case files that include required contents. The DPR should initially require staff to prepare an investigation plan for every case and assign an investigation number. Each case file should include:

- ❑ Cover letter
- ❑ Case file:
  - Summary
  - Narrative
  - Statements
  - Exhibits (e.g., residue testing results, photographs, invoices, county inspections)
  - Addenda (e.g., industry standards and best management practices).

The DPR should require staff to prepare case files in electronic form (may require scanning some information). The DPR should post completed case files to the Intranet. If applicable, the DPR also should link a case file to an action in the enforcement and compliance action tracking database.

The DPR should replace the many disparate numbers currently used by DPR for investigations (e.g., t-case number, priority investigation number, and complaint form number) with a single investigation number. This would reduce confusion caused by multiple numbers. The DPR also could use this investigation number for future databases linkages.

9. Process Improvement Recommendations *(continued)*

P6.	**Elimination of duplicative investigation efforts**	Develop a method for identifying a DPR versus a CAC investigation. The objective is to reduce DPR staff time spent on investigations that a CAC should conduct. The DPR should develop criteria for a CAC to use in classifying an investigation as either "simple" or "complex." The DPR should then consider participating only on complex investigations.
P7.	**Management of stakeholder expectations on investigations**	Manage expectations of stakeholder on investigation status and information. The objectives are to reduce incorrect information provided to stakeholders and provide staff sufficient time to prepare a complete case file before releasing information. The DPR should identify a reasonable completion date for each investigation and then convey this date to stakeholders. The DPR also should disseminate investigation information on a need-to-know basis only. For each investigation, the DPR should determine if a health or environmental risk is present. If a risk is present, the DPR should advise the stakeholder. If no risk is present, the DPR should not disclose information until staff completes the investigation. The DPR should reach consensus internally on investigation results prior to discussions with stakeholders. When possible, the DPR should solicit feedback from all levels in the organization when responding to stakeholder questions.
P8.	**Delegation of authority to regional office staff**	Provide regional office staff more decision-making authority on enforcement actions. The objective is to decrease the time required to respond to a CAC inquiry on an enforcement action. To delegate more authority, the DPR should train RO staff to consistently recommend appropriate enforcement actions to CACs. The director should regularly communicate to ROs the DPR's position on all types of incidents. The DPR should clarify the role of ROs to CACs. The DPR should regularly remind CACs that RO staff represent an extension of the director (e.g., at CACASA annual winter and spring conferences). The director should direct CAC concerns to ROs for assistance and resolution. The DPR also should allow appropriate RO staff to comment on a director's decision prior to releasing that decision to the public.

P9. Field investigation safety	Reinforce safety in investigation work. The objective is to reduce incidents occurring during field inspections. The DPR should conduct inspections during regular business hours or at reasonable times consistent with regulations. The DPR should restrict on-property sampling and surveillance where potential dangerous circumstances exist. The DPR should encourage staff to team with local law enforcement on inspection visits as needed. The DPR also should limit the number of inspections conducted at night.
P10. Replacement of NOPA review with updated hearing officer sourcebook	Eliminate review of CAC notices of proposed action (NOPAs). The objective is to reduce DPR staff resources spent on NOPA reviews. Rather than reviewing NOPAs annually for format and content, the DPR should instead update and provide access to the DPR's hearing officer sourcebook. The DPR should update the sourcebook to include current sample NOPAs and recent changes to fine guidelines and the appeal process. The DPR then should provide CACs secure Internet access to the sourcebook.
P11. Elimination of state-funded product compliance program activities	Consider eliminating state funded product compliance program activities. The objective is to reduce DPR staff resources spent on the product compliance program. Approximately three PYs in regional offices are state funded to conduct about 300 product inspections annually. The DPR also is federally funded for 250 product-related inspections and 200 overview or "use" inspections. Therefore, the state funded product inspections appear redundant. The product compliance program also is not legislatively required. The DPR does not prepare a report for the program. Through a recent BCP, the state eliminated sampling for adulterated products from the program because the DPR repeatedly found minimal adulterated products (on average, less than one percent of non-chlorine products samples are adulterated).
P12. Limitation on general permit condition activities	Evaluate whether DPR staff should continue to write general permit conditions for non-enforcement or non-CEQA issues. The objective is to determine if the DPR can reduce staff resources spent on this activity. The DPR could potentially redirect five enforcement staff PYs to other DPR activities. Prior to registering a product, the DPR should require a registrant to provide data and analysis to support general permit conditions and mitigation language (registrants are required by FIFRA to report "adverse effects" to U.S. EPA). For registered products, the DPR should require registrants to submit supplemental data via a reevaluation process. The DPR could then eliminate the practice of spending a disproportionate amount of resources preparing general permit conditions for the few registered products with adequate data.

9. Process Improvement Recommendations *(continued)*

P13. Higher mill charged to registrants necessitating general permit conditions

Increase the mill charged to registrants who necessitate DPR writing general permit conditions for non-enforcement or non-CEQA issues. The objective is to assess registrants a mill amount commensurate with the actual benefit provided by DPR for general permit conditions. If the DPR continues to write general permit conditions, the DPR should require that impacted registrants fund the activity.

P14. Uniformity of DPR policy letters

Develop and adopt a standard, department-wide name, format, and numbering sequence for all policy letters. The objective is to reduce inconsistent information provided to stakeholders. The DPR should replace the many different policy letters used (e.g., referred to as CAC letters, enforcement letters, informational letters, registration letters, policy letters, and executive office letters) with a single standard for all DPR policy letters.

P15. Revision to enforcement policy and procedure manual

Evaluate whether to update the existing enforcement policy and procedures manual to reflect current DPR policies. The objective is to reduce the number of new enforcement letters that repeat policies addressed in prior enforcement letters. The DPR should incorporate content from prior enforcement letters and other department policy letters.

The DPR should redesign the enforcement letter (and attachments) so staff can incorporate them easily into the manual. The DPR should regularly update the manual for new DPR policies. The DPR should reference sections of the manual rather than individual letters and discard rescinded enforcement letters. The DPR should post the manual to the website.

P16. Improvement of training and outreach program materials

Improve the quality and presentation of training and outreach materials. The objectives are to decrease the time and costs to prepare and update training and outreach materials and increase compliance with laws, regulations, and DPR policies. The DPR should:

- ❑ Create a uniform design for training and outreach products
- ❑ Prioritize training packages to update, and review priorities annually
- ❑ Outsource training and outreach document preparation (e.g., desk top publishing)
- ❑ Consider video conferencing to limit travel costs for training and outreach material development. This capability currently is provided using the Internet by companies such as webex.com
- ❑ Provide sample “best practice” outreach documents on the Internet.

P17. Benchmarking laboratory fees

Compare CDFA laboratory fees with fees of other companies providing the same services. The objective is to determine if DPR could reduce laboratory costs. The DPR should obtain estimates from at least three other suppliers. The DPR should specify the potential volume of business (e.g., number of samples per year), performance standards (e.g., maximum turn around time for results (e.g., 8 hours)), and the precision of results (e.g., for dietary risk)). Based on the comparison, the DPR should evaluate the mix of laboratory work performed by the CDFA and other suppliers.

P18. Other improvements

- ❑ Work with the California Office of Emergency Services to develop a response plan for each county (not necessarily for disasters, but for prevention). The DPR should identify steps to use for damage control following an incident.
- ❑ Increase the dollar value of CAC administrative penalties. The objective is to link the size of penalty with the severity of the incident.
- ❑ Significantly increase CAC administrative penalties for multiple offenders. The objective is to create a greater incentive not to repeatedly violate pesticide laws.
- ❑ Evaluate whether to use CACs as hearing officers for DPR administrative civil penalty cases.
- ❑ Evaluate whether to develop a DPR policy to avoid responding to minor illegal residues identified through the market surveillance program.
- ❑ For future compliance assessments, perform a pre-compliance assessment with senior RO and CACs to identify weaknesses and focus on these identified weaknesses during the compliance assessment.
- ❑ Include the number of dealer audits as a regulator activity used for CAC compensation.

10. E-Government Candidates

EG1. Electronic submission of activities summary forms

Allow CACs to submit regulatory activities summary reports electronically. The objectives are to reduce the time required for CAC's to prepare and submit data and reduce the time required by DPR to process the data. The DPR could eliminate duplicative data entry within the current process. Potential other capabilities include:

- ❑ Provide CACs easy completeness checks
- ❑ Automatically check data for outliers (using previous CAC data) and provide prompts to CAC if data are inconsistent
- ❑ Prepare draft and final summary reports automatically
- ❑ Populate mill assessment database directly
- ❑ Link data directly to U.S. EPA reports of county-level regulatory activities summary data.

EG2. Hand held devices for market surveillance

Use hand held electronic devices to record market surveillance program data in the field. The objectives are to reduce duplicative data entry and decrease the time from staff collecting a produce sample and the CDFA beginning laboratory analysis of the sample. The DPR's staff could enter market surveillance data directly into a hand held device (such as those used by rental car companies for rental car returns or by the U.S. Postal Service for recording a package delivery). Potential capabilities include:

- ❑ Eliminate hand written forms
- ❑ Transfer data electronically to the CDFA laboratory
- ❑ Reduce errors caused by CDFA staff interpreting hand written forms
- ❑ Reduce data entry time by downloading data to internal databases.

EG3. Hand held devices for product compliance program

Use hand held electronic devices for the product compliance program. The objective is to reduce the time required to confirm current product registration. A hand held device (such as those used by rental car companies for rental car returns or by the U.S. Postal Service for recording a package delivery) could provide DPR staff with an easy way to enter product compliance data in the field. Potential outcomes include:

- ❑ Eliminate manual forms
- ❑ Access download of currently registered products

EG3. ***(continued)***

- ❑ Reduce data entry by downloading data to internal databases
- ❑ Provide future capability to scan a UBC label to determine if product is currently registered (long-term initiative and requires obtaining UBC lists from registrants).

The DPR would use this device for the federally funded portion of the program should it discontinue the state funded portion of the program.

EG4. Improvement of online enforcement letters

Provide greater Internet access to, and search capability for, enforcement letters. The objective is to reduce resources required to distribute letters to stakeholders (primarily CACs and DPR staff). The DPR should develop a taxonomy (a classification or categorization) for organizing enforcement letters online, post online PDF versions of enforcement letters from the past five years, and provide key word searches of the letters. The DPR should provide the following capabilities:

- ❑ E-mail CACs and their staff new enforcement letters (with attachments) within one hour of the letter being signed by the DPR
- ❑ Allow stakeholders to "subscribe" to enforcement letter updates. The DPR would automatically notify ("listserv") stakeholders by e-mail any new enforcement letter
- ❑ Provide CACs with a weekly or monthly recap of enforcement letters.

EG5. Internet access to enforcement process

Provide Internet access to relevant enforcement documents and materials. The objectives are to reduce telephone inquiries and staff time. The DPR should provide the following:

- ❑ More recent copies of:
  - CAC administrative civil penalty report (latest is July 1, 1996 to June 30, 1997)
  - Residue in fresh produce report (latest is 1997)
  - Statewide pesticide regulatory activities summary report (latest is 1998/99)
- ❑ Negotiated work plans
- ❑ Effectiveness evaluations
- ❑ Compliance assessments
- ❑ Summary matrix of enforcement, compliance, and public protection options
- ❑ Query access to pesticide illness surveillance program (PISP) data.

EG6. Answers to frequently asked questions

Provide Internet access to answers that stakeholders often ask. The objectives are to reduce staff time responding to similar questions and provide consistent responses to stakeholders. Answers to these "frequently asked questions," or FAQs, can provide up-to-date expert knowledge on any subject of common interest. Among the subjects for which FAQs should be developed are:

- ❑ Enforcement activities conducted by CACs
- ❑ Enforcement activities conducted by DPR
- ❑ Enforcement and compliance options and authorities (e.g., penalties, orders, actions, revocation/suspension).

EG7. Online forum for administrative civil penalty cases

Provide CACs an online forum to share information on administrative civil penalty cases. The objective is to increase information available for CAC's to use in an administrative civil penalty case. The DPR should provide CACs with a forum for discussing and sharing CAC experiences on all aspects of the administrative civil penalty process (e.g., penalty levels, NOPAs, NOFDs, findings of fact). After joining a forum, a participant's messages are broadcast to everyone participating in that online forum (also known as chat rooms).

The DPR should provide a threaded e-mail discussion capability. This capability provides a running log of remarks and opinions about a subject. Users e-mail or submit their comments directly, and the application maintains them in order of originating message and replies to that message. Threaded discussions are used in chat rooms on the Internet, on online services, and in groupware products.

EG8. CAC access to notices of final decision

Provide CACs secure Internet access to notices of final decision (NOFDs). The objective is to provide full disclosure and information for CAC's to use in an administrative civil penalty case. The DPR should obtain NOFDs from CACs and post them on a secure website (i.e., extranet) for viewing and downloading by authorized CACs. The DPR should remove confidential information from NOFDs, as needed.

EG9. Internet access to pesticide residue data

Provide Internet access to pesticide residue data. The objective is to reduce telephone inquiries and staff time. Enforcement staff should complete their review of the query tool (known as the "residue application"). The DPR then should develop the capability to allow online query and report capabilities of pesticide residue data. The DPR also should generate and provide online summary reports of pesticide residues that are most frequently requested by stakeholders.

EG10. Other candidates

- ❑ Provide additional prompts on the website to allow end users to ask questions of staff and seek help (i.e., help desk support capabilities).
- ❑ Provide Internet access to training packages.
- ❑ Provide secure Internet access to case files.
- ❑ Provide key word search capabilities to the procedural guidance manual.

11. Information Technology Improvements

IT1. Improvements to enforcement and compliance action tracking database

Improve capabilities of the enforcement and compliance action tracking database. The objectives are to reduce the time required by CACs to submit and access data, reduce data entry requirements of staff, and increase stakeholder access to enforcement and compliance data. The DPR should modify the enforcement compliance and action tracking application and database to track the following actions:

- ❑ CAC administrative civil penalties
- ❑ DPR administrative civil penalties (for users of materials)
- ❑ DPR administrative civil penalties (for all other actions, including mill assessment penalties)
- ❑ Suspensions and revocations (requires communication between licensing and certification, mill, legal, enforcement staff)
- ❑ Referrals to attorney general.

The DPR should create a web-accessible form that allows the CAC to complete and submit data that populates the DPR database directly. As planned, the DPR should incorporate the inspection forms module to the database in 2001, and also deploy a compliance assessment and complaints module.

The DPR should identify information in the enforcement and compliance action tracking database that it can release to the CACs and the public (e.g., enforcement actions by county or enforcement actions by licenses). The DPR then should provide Internet access to this information.

IT2. Product compliance and residue data entry by RO field staff

Allow regional office field staff to either submit electronic data, or populate the product compliance database and the residue databases directly, rather than providing hard copies to headquarters for data entry. The objective is to reduce duplicative data entry and reduce errors caused by headquarters interpreting RO staff information. The DPR should update the product compliance and residue databases to allow RO staff to perform this data entry directly.

IT3. Other candidates

- ❑ Provide field staff laptop computers so they can complete electronic forms and e-mail market surveillance program and product compliance program information
- ❑ Eliminate redundant databases that support regulatory activities summary data
- ❑ As an interim step prior to web-enabling regulatory activities reporting, provide CACs with electronic versions of the regulatory activities summary report (in Microsoft Excel) that allows them to complete and email these required reports to the DPR.

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Pesticide Use Report Process

Process Description

- Growers must report monthly to the county agricultural commissioner (CAC) all pesticides they use, and commercial pest control operators must report within seven days of use.
- Structural pest control operators (applicators), professional gardeners, and other nonagricultural pest control operators also must report all pesticide use to CACs monthly.
- Agricultural use also includes pesticide applications to parks, golf courses, cemeteries, rangeland, pastures, and roadside and railroad rights-of-way. The primary exceptions to "full use" reporting requirements are home and garden use and most industrial and institutional uses.
- A user may file reports either in hard copy or electronically, via modems and local telephone lines. Approximately 90 percent of use reports are filed in hard copy, 10 percent are filed electronically. The DPR provides six different preprinted forms that are used to record pesticide use, each one designed for unique requirements of the user and purpose of the use report.
- Among the 25 individual data elements collected on each production agricultural pesticide use report, the following information is provided:
  - Date, time, and location (section, township, and range) where the application was made
  - Detailed identification and amount of pesticides used
  - Commodity, if applied to a crop
  - Operator and site identification numbers
  - Planted and treated acres.

Process Description *(continued)*

- Each county key enters and validates use report data against county-maintained local permit and operator registration databases,[1] and extracts from the DPR product label database (a database of all registered pesticide products). This includes validating that the commodity reported is a legal use of the pesticide product. The County returns data with errors to the submitter for correction, and transmits correct data to the DPR.

- Periodically, counties create a text file of the data, and either e-mail this file or mail a floppy disk containing the file to the DPR.

- The DPR verifies the file format and validates use data submitted by counties, conducting over 52 validations and investigating causes for the error (e.g., erroneous data in the product label database). The DPR provides a report of any records failing one or more of the validations to each county, and key enters any corrections made to this list and returned by the county.

- The DPR loads records that pass all validation checks to the pesticide use report database.

- The DPR conducts various analyses of the data, and makes available standard reports of these analyses, as well as the master data. The DPR updates the product label database, as necessary, when errors are found during the validation of use reports.

[1] The DPR key enters use reports for three counties. Kings County key enters data using a Visual DataFlex application. All other counties key enter data using either a State or County DOS DataFlex application.

2. Recent and Planned Improvement Initiatives

Recent Improvements

- Kings County has put into production a Windows-based version of the current DataFlex system for managing permits and pesticide use reports. The new system was developed in partnership with the Counties of San Luis Obispo, Stanislaus, and Tulare.

- The DPR upgraded the program used to "load" data from the use reports into the PUR Oracle database, and included several additional data validations to improve the quality of use report data.

- In 1999, the DPR made the database containing all use reports since 1990 available on CD-ROMs.

- In August 1999, the DPR formed the PUR Technical Advisory Committee. The advisory committee members all have technical and programmatic familiarity with the PUR and represent diverse academic, governmental, and non-governmental organizations, and industry. The PUR Technical Advisory Committee is compiling a list of issues concerning the PUR and its associated databases and will develop specific proposals aimed at resolving these issues.

Planned Improvements

- The DPR is in the first year of a project to deliver Internet access to pesticide use information. The proposed Internet-based pesticide resource directory will provide detailed pesticide use information, as well as geographic information, that is not currently available nor in formats needed by the regulated community, regulatory agencies, school districts, and the public. The DPR was authorized one-time funding of $375,000 for FY 2000/01 and $25,000 for FY 2001/02 to purchase and install an internal web application development server, an external production server, and a large tape backup system, including the software licenses to support them. The DPR also was authorized five new positions and an additional $514,000 annual funding each year, beginning in FY 2000/01. These new funds are to develop applications, maintain databases, operate business transactions associated with the pesticide use reporting and registration activities, and fund the five new positions.

- The DPR is partnering with Kern County to assist with a pilot test of the county's GIS application for permitting and pesticide use reporting. Doing so will help prove the concept that this production system can be used for a greater number of concurrent users, and allow the DPR to determine the business case for using this application and Kern County's experience for other counties to use digitized data for permitting and pesticide use reporting.

- The DPR is partnering with nine counties to pilot with multiple users and potentially leverage for other counties a new permitting and use reporting system.

- The DPR solicited and received input and program improvement suggestions from over 150 individuals in May 2000. In response to this U.S. EPA-funded conference, the DPR formed two technical work groups to address issues surrounding consistent understanding and use of two data elements only:

  - Commodity/site work group - organized to create a cross-reference of commodity names and codes, including those used by USDA (Farm Service Agency and National Agricultural Statistics Service), U.S. EPA, and various internal DPR programs. This workgroup has met several times.

  - Chemical/pesticide - organized to identify common chemical names (e.g., provide a cross-reference or chemical dictionary). This workgroup has not yet met.

3. Process Overview

Inputs

Growers/pest control operators

- ❑ Pesticide use reports

DPR

- ❑ Product label database
- ❑ MTRS database (geographic references)

CAC

- ❑ Issued permit and operator identification file

Interested Stakeholders

- ❑ PUR data requests

Process

CACs

- ❑ Receive use report data from submitter (electronically via the California electronic data transfer system (CEDTS), by mail, or from walk-ins)
- ❑ Code, key enter, load use report data to county database
- ❑ Validate use report data automatically with County-owned system (55 counties) against permit and operator identification file
- ❑ Return data with errors to the submitter
- ❑ Submit validated county-wide pesticide use report data to DPR
- ❑ Correct data returned by the DPR and resubmit the hardcopy to DPR

DPR

- ❑ Code, key enter, load use data for three counties
- ❑ Validate pesticide use report data, including comparison with product label database
- ❑ Generate error report by county of failed records
- ❑ Review product labels and database for possible errors, and update the product label database
- ❑ Mail error report to counties to correct the errors
- ❑ Key enter and validate corrected use data returned by counties
- ❑ Conduct PUR trend analysis
- ❑ Publish annual statewide report of pesticide use data

Performance Measures

- ❑ None

Outputs

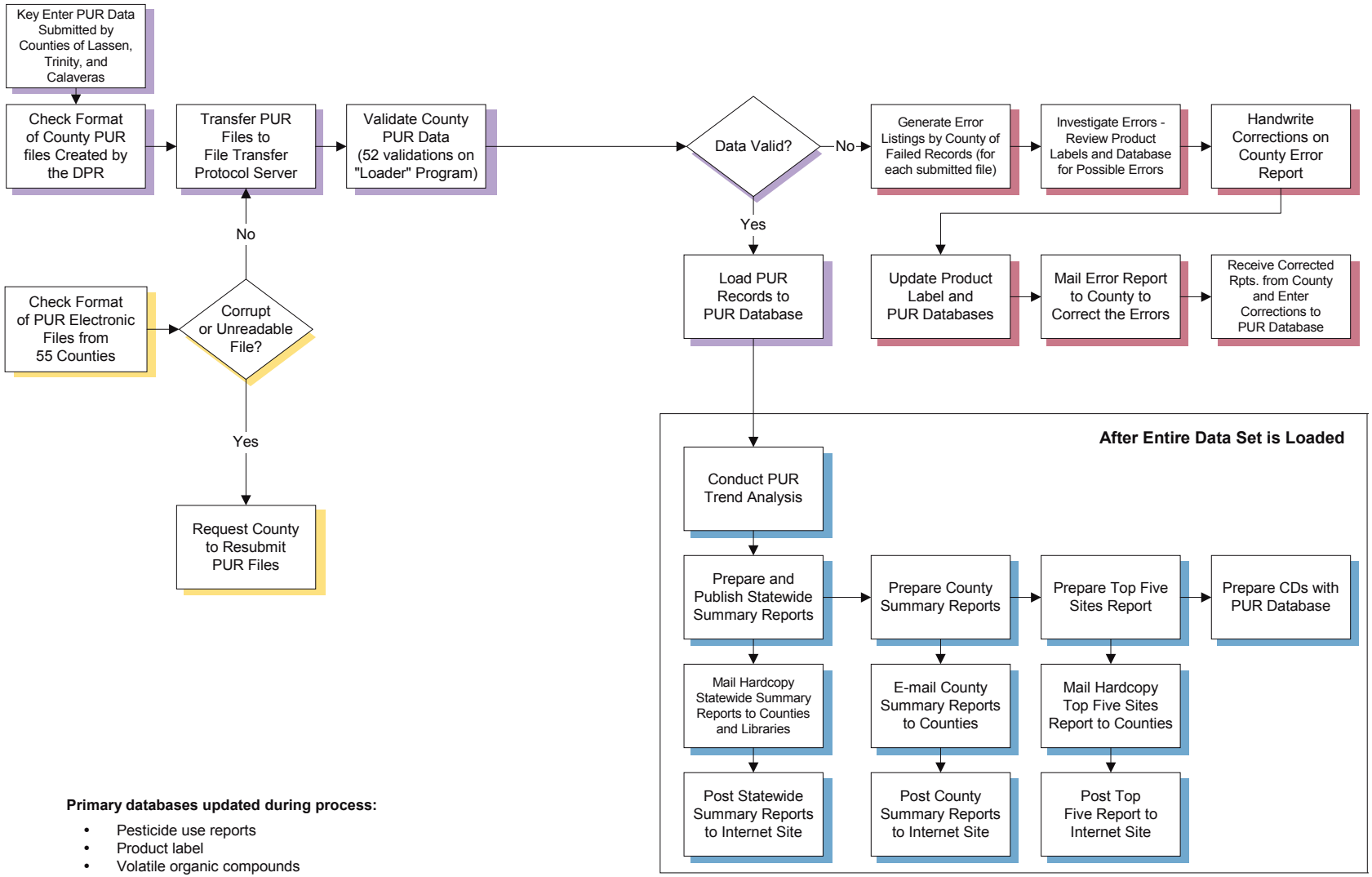
CACs

- ❑ Validated use data to the DPR
- ❑ Erroneous data to the submitter
- ❑ Corrected error lists
- ❑ Ad-hoc reports

DPR

- ❑ Error reports to counties and DPR staff
- ❑ Updates to the following databases:
  - Pesticide use reports
  - Product label
  - Volatile organic compounds
- ❑ Various standard reports and data files:
  - Statewide summary of pesticide use report data by chemical and commodity
  - County summary reports by chemical and commodity
  - Full pesticide use database on CD ROM (three formats)
  - Ten top chemical uses by county
  - Ten top crops treated by chemicals for each county
- ❑ Other reports, such as:
  - *Pesticide Use Analysis and Trends from 1991 to 1996*
  - *An Analysis of Pesticide Use in California from 1990 to 1995*
  - Ad-hoc reports

4. Process Workflow



Primary databases updated during process:

- Pesticide use reports
- Product label
- Volatile organic compounds

5. Metrics

Workload

2,500,000	PUR records submitted by counties to the DPR in 1999 (...)
25	Data elements for each PUR record submitted
250	Requests annually for DPR to develop customized queries and reports from PUR database
Unknown	Number of updates annually to the product label database
2,000	Number of hours annually responding to PUR information requests

Reported Pesticide Use

26,000,000	Records in PUR database for 1990 through 2000
12,436,000	Records in prior PUR database for 1974 through 1989
183,000	Unique grower-site-crop identification combinations (each year)
1950s	Limited use reporting began
1970	Year PCOs required to report all pesticides used, and growers to report restricted materials used
1990	Year that full use reporting began

Performance

0.5 %	Final error rate for 1999 (records failing to meet one or more validation checks / total records submitted)
Two days - one week	Time expected to validate data and mail error report to county
Several months	Time expected to correct PUR data errors and key enter into PUR database
36 %	Proportion of county 1999 use reports received by the April 1, 2000, cutoff date
December 6, 2000	Date last county 1999 use report was received
September 2000	Month DPR published preliminary 1999 use reports and database
August 2001	Month DPR expects to publish final 1999 PUR use reports and database

6. Stakeholder Information and Service Needs

Information Needs

- Accurate pesticide use data
- Timely pesticide use data
- Historical pesticide use trend data
- Instructional materials on all aspects of use reporting

Service Needs

- Capturing and editing pesticide use reports
- Technology support (maintenance, enhancements) of computer applications
- Training on all aspects of use reporting

7. Strengths

People

- Knowledgeable staff who respond to approximately 250 public requests each year for custom queries of the PUR database.
- Excellent liaison and ombudsman support from DPR regional offices and DPR executive office.
- Possible two-day turnaround times to deliver to counties the list of any PUR records that failed one or more validation checks. This has increased to a week or more due to various support and technology issues.
- Less than one-half of one percent of County use records fail one or more of the extensive validation checks. Even with such a low, final error rate, the DPR continues to systematically identify and carry out new data validations to further reduce error rates.
- Partnership with nine counties on a pilot project to deploy the restricted materials management system (RMMS). The RMMS was developed by four counties (Kings, Tulare, San Luis Obispo, and Stanislaus) and currently meets or exceeds all functionality now available within the current DPR-supported DataFlex system for issuing restricted material permits and reporting pesticide use. This pilot project will deploy the application to these four counties and five others (Colusa, Kern, San Diego, Shasta, and, Ventura), and evaluate the results of the pilot. Long-term benefits to the DPR are a uniform application statewide, and potentially reduced support costs (if DPR provides this support). Long-term benefits for the counties include improved data quality, more timely reporting, reduced workload (if growers and applicators enter data), and reduced operational costs.
- Partnership with Kern County to test the County's GIS applications to create, maintain, and integrate a field border database with the RMMS in a multi-user environment. The GIS application is already in production at Kern County and will be used as an application interface to future State of California Web-based restricted materials permit and pesticide use reporting (RMPP/PUR) system. Long term benefits to the DPR are to allow for the implementation of an accurate, consistent, and compatible statewide GIS restricted materials permit program in all counties, as well as to allow Internet access to field level tabular and spatial data. The long term benefits to counties will be pre-tested, end-user tools suitable for use with county GIS data to issue restricted material permits and satisfying California Environmental Quality Act (CEQA) requirements

7. Strengths *(continued)*

Process

- Partnerships with five counties to develop field border data (digitized boundaries for permitted agricultural field sites). Agricultural field boundary and cropping data are key components of the permit and pesticide use reporting program, and are critical to DPR needs. Improving the spatial resolution of pesticide applications from the current square mile section to an actual field site has been shown to significantly improve DPR's ability to responsibly regulate pesticide use, and so enhance the protection of California's citizens.

Technology

- Most extensive data collected on pesticide use by crop in the world. The database allows more accurate estimates of dietary risk, as well as estimate exposure and potential risk to workers. This allows regulators to make much better judgments on pesticide risk, increasing the credibility of risk management decisions. The data also are useful to other State, local, and federal agencies to evaluate human illness clusters in epidemiological studies, estimate the potential impact of proposed use limitations on endangered species, track pesticide use in areas known to be susceptible to ground water contamination, provide accurate data on volatile organic compounds contained in pesticides, and understand patterns and changes in pest management practices.

- Program data used to develop and help make decisions on: (1) pesticide registration for special local needs, emergency crop/pest uses (Section 18s), and reduced risk products, (2) risk assessments and mitigation (Food Quality Protection Act), (3) exposure assessments and mitigation, (4) and program review and development (policies, permit conditions, regulations, strategic planning, and other issues facing DPR and the counties).

8. Internet Access to Process

Information Now Available on the Internet:

- ❑ Pre-formatted reports
  - Annual top five uses, by county, 1998 through 1999
    - ◆ Top five pesticides used
    - ◆ Top five sites in pesticide used
  - Annual pesticide use summary report, by commodity, 1990 through 1999
    - ◆ Statewide
    - ◆ County
  - Annual pesticide use summary report, by chemical, 1990 through 1999
    - ◆ Statewide
    - ◆ County
- ❑ Corrections to CD ROM datasets (1992, 1993, 1996)

Services Now Available on the Internet:

- ❑ None

Links Provided to Other Sites:

- ❑ None

9. Process Improvement Recommendations

P1. Full data validation at time of data entry

Maximize the number of required validation checks of PUR data within any application used by a county to capture use reports. The objectives are to reduce the time required to place use data into the statewide PUR database, reduce county and DPR resources required to ensure use data are correct and complete, increase the number of use reports captured in the statewide PUR database, allow counties to capture the actual crop treated as recorded on the use reports, and eliminate hardcopy error reports. Trapping errors earlier in the process (at the time use data are key entered) will allow counties to investigate and correct the error when memories are still fresh and any hardcopy use report is easily accessible.

The DPR should determine which of the 52 data validation checks now done by DPR's "loader" program can be shifted to county applications that are now used to key enter original use reports. (Nearly all counties use a version of the DOS-based DataFlex application, and one county (Kings) is using the new RMMS application.) The DPR then should develop a plan for designing, implementing, testing, documenting, and placing into production the proposed enhancements to the county applications.

Although there are 52 validation checks now performed by the DPR, three situations account for nearly all errors in use data submitted by counties to the DPR:

- The crop identified on the use report is not listed on the product label. In fact, when each of these crop "errors" are researched manually, most are found to be correct because the crop listed on the use report is a subset of the "general" crop listed on the product label (e.g., Chinese c*abbage* is on the use report, while *cabbage* is on product label but Chinese cabbage is not).
- High rates of product use. Some use reports show extremely high rates of use (pounds of pesticide per area or volume treated). Though some of these large rates may have actually been applied, manual research of the data finds that most often the values were mistakenly entered.
- Duplicates and identification errors. Counties submit a significant number of records that are either duplicates of prior records or which contain agricultural field identification errors.

Each of these situations is relatively simple to validate automatically, and could be done by applications now used by counties. Potential solutions may include the following:

- Crop validation will require construction of a commodity code table that identifies all possible crops that would be a legal use of each "general" crop. Counties would prefer to enter the crop listed on the PUR rather than categorize it under a general category, especially in cases where the crop overlaps more than one crop code. This information provides more accurate information for various kinds of analyses of the use data.

9. Process Improvement Recommendations *(continued)*

P1. ***(continued)***	❑ Validating the rate of use will require use of a simple table already constructed by the DPR that holds two values for each product and site: (1) pounds of use of the product on a site equivalent to 200 pounds of active ingredient (a.i.) per area treated for most pesticides and 1,000 pounds of a.i. per area treated for fumigants, and (2) 50 times the median rate for all uses of this product on this site during the previous calendar year. Also, the DPR should consider comparing use rates against a "maximum" use rate (in gallons or pounds). These maximum rates are available from a third party source for approximately 80 percent of registered products. The crop validation solution also would help resolve the DPR's miscoding of crops listed on the registered product label to the product label databases (discussed earlier under the "Pesticide Registration" section of this report). The objective is to record in the product label database only crops listed on the registered product label, while providing a separate means to validate pesticide use reports against the product label database.
P2. County contract performance requirement	Modify county contracts to require that counties submit all PUR data received during the prior month within 20 days (or a "reasonable time frame") of the end of the prior month. The objective is to obtain all PUR data each month when it is due to the DPR. This requires only a minor change in the wording of an existing contract provision, but is significant in terms of ensuring all PUR data received by a county during the month are provided to the DPR the next month. The DPR can enforce this contract provision if it is clearly stated, and may need to remind counties of the provision during any on-going training or assistance efforts.
P3. Reduced pesticide use reporting	Eliminate reporting of non-agricultural (structural) pesticides. The objective is to reduce the resources required to prepare, submit, and report pesticide use.
P4. Increased training and documentation for capturing and reporting pesticide use	Provide more specific written instructions and workshops to pesticide users and counties. The objective is to reduce the error rate. This would include developing and conducting PUR workshops to clarify reporting requirements and tools. These workshops can be targeted (i.e., error checking; general crop category vs. specific crop; or rates of use) or general (i.e., regulations and policies).

9. Process Improvement Recommendations *(continued)*

P4. ***(continued)***

The DPR should enhance existing materials with more specific information and develop new materials for the following components:

- *How to report use* – an overview of when a grower or PCO must report pesticide use to counties, when a county must report use to the DPR, and the steps necessary to submit use reports.
- *Answers to frequently asked questions* – attempts to answer questions that stakeholders often ask. These could include identification of who must report and when, where forms can be obtained, and typical errors in reporting use, such as crops treated, amount of pesticide used, and duplicate PUR records. Two objectives are to reduce errors and reduce the number of invalid duplicate records. Accuracy of the information provided by the DPR could be enhanced by its frequent exposure to criticism by an interested, and occasionally well-informed, audience.
- *Pesticide Use Reporting: An Overview of California's Unique Full Reporting System* – annual updates to this document to ensure current and relevant information is available.
- *Data analysis issues* – items that PUR data users must be aware of in order to fully understand the usefulness and limitations of use data. Examples include explaining how counties define and use certain fields differently (e.g., grower and site identification), how the DPR "corrects" errors in data (e.g., replace values with a null character or an estimate of the correct value), the actual level of precision for specific data elements, and sample SQL code.
- *Data definitions* – clear standards for the meaning of PUR data fields and procedures. The objective is to ensure that growers, PCOs, and counties enter consistent data.
- *Performance standards* – commitment from the DPR to the number of days that it expects will be needed to return error reports (if these are still generated by the DPR) and to publish PUR data files and analyses
- *Procedures document* – policies, procedures, and enabling statutes/regulations for conducting all aspects of use reporting. This would be a single document unifying all enforcement letters that counties must now rely on to understand requirements and data protocols.

Access to this documentation on the Internet should take advantage of point and click tools to drill down on subjects of interest to the end-user.

9. Process Improvement Recommendations *(continued)*

P5. Data error tracking and reporting

Formalize a process to allow individuals to report possible errors in PUR data and track the resolution of these reports. The objectives are to allow any individual to report potential PUR data errors and ensure that each reported error is resolved. The DPR should allow any individual who might find a potential error in the PUR database to report it to the DPR. The DPR then should put in place a process to ensure that the DPR resolves each reported error and responds to the person reporting the error. This process should include a means to notify the DPR, a response to the individual within one day that the request was received, investigation of the potential error, determination of a solution, marking the request as being resolved, updates to the PUR database, and notification to the originator of what the resolution is.

P6. Pursuit of non-reported pesticide use

Formalize an on-going effort to utilize mill assessment, product label, and PUR information to determine potential pesticide use that goes unreported. The objective is to reduce the largest source of true pesticide use data errors: unreported pesticide use. As noted under mill assessment recommendations, this effort also will help determine registrant compliance with sales reporting requirements.

The DPR should develop statistical methods to use the pesticide sales data to determine PUR compliance with reporting requirements and to develop an estimate of the percent of pesticide users that do not report. This measure is essential to determine the statistical confidence of pesticide use data and to follow up with possible reminders, training, and enforcement. Developing this estimate will require a larger study than just comparing PUR with the mill assessment data and will require significant corrections be made to both the sales database and the PUR database.

Statistical techniques may include working with each county and determining the number of unique grower and site identifier combinations. The DPR should examine how these counts compare with county permits, use reports received in the counties, and the number of use reports submitted to DPR. After making adjustments for how these code combinations are reported, the DPR can identify significant differences that could be explained by under reporting of pesticide use.

The DPR should develop an application, accessible by authorized users, to mill assessment, sales, and PUR that provides a means to identify underreported pesticide use. Any authorized user with a Web browser could have access to the data.

9. Process Improvement Recommendations *(continued)*

P7. Prioritization of GIS developers' group recommendations

Review GIS developers' group recommendations for identifying field sites and incorporate required modifications into regulations. The objectives are to ensure that the DPR follows through with this group's initiatives and that efforts expended by GIS group participants are effective and efficient. One potential benefit of this group's recommendations to-date is allowing for consistent identification of sites tracked by the DPR's geographic information system and provided to CACs. Those CACs with GIS then could quickly identify restricted sites when issuing permits.

P8. Strengthening UC efforts

Strengthen the relationship with the University of California Statewide Integrated Pest Management Project, including more frequent updates of PUR data throughout the year. The objective is to provide another channel for distributing PUR data. The UC site provides access to DPR's PUR data. However, due primarily to funding constraints, the site restricts the number of fields that can be queried, may take a week to respond to a query, is understaffed to provide full support, and resides on a less than adequate server.

The DPR should develop a team of UC and DPR staff to determine what role, if any, the DPR should have in strengthening the capabilities of the UC website.

P9. Clear ownership of PUR process

Assign a single position the authority and responsibility for PUR transaction and reporting functions. The objective is to ensure that the PUR process is managed. The person filling this position should be given the authority to:

- Make decisions on all PUR policies, practices, projects, and technical issues
- Coordinate day-to-day operations
- Plan and orchestrate established work groups. Currently, there are four such groups: PUR technical advisory committee, external PUR work group, internal PUR work group, and commodity/site code work group. A chemical/pesticide work group will be established.
- Prioritize workload and make staff assignments.

One of the most pressing, and currently unassigned, responsibilities of this position will be managing implementation of the pesticide use report implementation plan. This plan is designed to address all of the issues discussed at the May 2000 PUR conference. **Appendix F** to this report provides an exhibit prepared by the DPR that summarizes these issues.

P10. Reorganization of technology support

Place all Division of Enforcement, Environmental Monitoring, and Licensing IT positions under direct supervision of a single information technology position. The objectives are to provide technical leadership to the 25 authorized IT positions within the division, complete prioritized application modifications, and ensure that on-going application maintenance is performed (including the PUR applications and database). The DPR should ensure that an application programmer is assigned to meet all prioritized PUR application program enhancement, modification, and maintenance needs.

The DPR also should assign responsibility of technically administering the department's databases to the ITB, using currently authorized ITB positions. Database administration includes the physical design and management of the database and the evaluation, selection, and implementation of the database management system (e.g., Oracle).

P11. DataFlex support

Determine and then commit to a specified level of DataFlex support. The objectives are to prevent further decaying of this important application, provide essential tools to reduce the time required to get use data into the PUR database, and identify baseline needs and prepare plans to make basic repairs to the DataFlex application.

Currently, the DPR provides counties with basic, emergency support for one or two days per incidence. The DPR should determine whether counties should be getting consistent maintenance and upgrade support, how this support should be provided (e.g., by the DPR, by a supplier, by the county), and how this support should be funded.

The DPR should develop a forum (e.g., an information technology advisory group) to obtain and document required changes to DataFlex (in advance of full replacement of the application). This group should be given full authority to decide what modifications should be made and when. Doing so should ensure that only high priority enhancements are made to this older application.

In addition to the process improvement suggested previously to maximize data editing at the point where data are key entered, the following are other basic repairs that should be made to the DataFlex application.

- ❑ Disable the ability of DataFlex end-users to override invalid section-township-range values
- ❑ Add an audible warning (currently there is a visual display, but the person entering data often is not "looking" at the screen and can easily override without knowing) that a product/crop combination is an illegal application, and then require the user to confirm entry of the illegal application. Doing so allows trapping of a true error, while allowing an illegal application be recorded
- ❑ Remove all other overrides.

P12. Business case for a statewide permitting and PUR system

Evaluate the feasibility of deploying a county-developed permitting and use reporting system to all counties. The objective is to determine the need for, and benefits of, statewide use of this permitting and pesticide use reporting application. Doing so should improve the DPR's ability to justify the need for this capability and obtain Department of Finance approval for necessary funding and personnel resources. Any DPR plans to implement an information technology of this scope will require a feasibility study report (FSR), and this business case can provide the material to prepare a good portion of the FSR.

Kings County currently uses a new application as its sole production system for permitting and pesticide use reporting, and three other counties plan to place it in production during 2001. The four counties that developed the new application have future plans that include web-enabling this Windows-based application to allow remote entry of pesticide use.

The DPR already has agreed to help fund a pilot to deploy the new application to nine counties. The DPR's plan to partner with these nine counties could reduce the time required to deploy the system, leverage existing county plans to Web-enable the system for remote access, and reduce or eliminate the number of competing, non-standard systems used by counties for the next generation of a permitting and use reporting application. The contract with the DPR and counties will contain provisions to ensure that DPR funding is used efficiently, that the project contains specific milestones for completion, and that performance measures are established to measure whether project objectives have been met.

The business case would include:

- ❑ County and other stakeholder expectations for an improved permitting and use reporting application
- ❑ How current processes are failing to meet those expectations
- ❑ Opportunities to improve based on benchmark organizations, such as Kings County
- ❑ Other motivators for changing how all stakeholders operate now
- ❑ Consequences of not adopting an improved permitting and use reporting application, and how this failure to act would impair the capability of the DPR to carry out its mission
- ❑ An assessment of the political viability of an improved permitting and use reporting application. The political elements of the business case should be grounded in legislative mandates and mission requirements and, if those are changing, reflect those changes
- ❑ Assumptions, constraints, alternatives, and a proposed solution.

P12. ***(continued)***

- A high-level economic analysis of the cost of current performance problems and the potential for cost savings and other benefits, based on benchmark data and best practices from leading organizations. In other words, does an improved permitting and use reporting application have the potential to yield a reasonable return on investment?
- Communication of the business case with counties and other stakeholders
- Integration with other improvement efforts, such as the GIS partnership with Kings County.

P13. Business case for statewide GIS applications

Evaluate the feasibility of deploying the Kern County GIS application to all counties. The objective is to determine the need for, and benefits of, statewide use of GIS mapping for permitting and pesticide use reporting. Doing so should improve the DPR's ability to justify the need for this capability and obtain Department of Finance approval for necessary funding and personnel resources. Any DPR plans to implement an information technology of this scope will require a feasibility study report (FSR), and this business case can provide the material to prepare a good portion of the FSR.

The business case would include:

- County and other stakeholder expectations for GIS
- How current processes are failing to meet those expectations
- Opportunities to improve based on benchmark organizations
- Other motivators for changing how all stakeholders operate now
- Consequences of not adopting GIS and how this failure to act would impair the capability of the DPR to carry out its mission
- An assessment of the political viability of GIS. The political elements of the business case should be grounded in legislative mandates and mission requirements and, if those are changing, reflect those changes. For example, permits can currently be challenged as not in compliance with the California environmental quality act (CEQA) because they are not specifically mapped. The Kern County GIS system generates permits and maps that are in compliance with CEQA
- Assumptions, constraints, alternatives, and a proposed solution.

P13. ***(continued)***

- ❑ A high-level economic analysis of the cost of current performance problems and the potential for cost savings and other benefits, based on benchmark data and best practices from leading organizations. In other words, does GIS have the potential to yield a reasonable return on investment?
- ❑ Communication of the business case with counties and other stakeholders
- ❑ Integration with other improvement efforts, such as the nine county permitting and use reporting pilot.

Depending on results of the business case, the DPR then could rewrite and resubmit the budget change proposal (BCP) for funding county development of digitized field boundary data. The objective is to obtain funding for the most important spatial data component required to adequately manage statewide pesticide use.

P14. Prioritizing work groups

Determine which work groups to form and retain, then prioritize and publish existing issues and recommendations to improve PUR process and data. The objectives are to commit resources to preferred work groups, eliminate all others, and ensure that the efforts expended by work group participants are effective
and efficient.

The DPR has formed (or plans to form) the following PUR work groups:

- ❑ PUR technical advisory committee
- ❑ External PUR work group
- ❑ Internal PUR work group
- ❑ Commodity/site code work group
- ❑ Chemical/pesticide work group (not yet established).

If DPR retains any work group, it should assign a DPR employee as lead of the group, formalize a charter, and obtain approval signature from DPR's executive office. The charter should include the name, authority, purpose, scope of responsibility, membership, and meeting frequency. Authority for each group should be sufficient enough to assign tasks and ensure recommendations are implemented.

P14. ***(continued)***

The individual assigned leadership for each work group should be held responsible for keeping participants focused on the task at hand, establishing and maintaining communication channels, and ensuring all action items are assigned and completed. The DPR must provide any employee assigned to a work group with sufficient hours during the year to carry out assigned work group responsibilities. This means that selected other responsibilities assigned to that position must either be either reassigned to someone else or eliminated.

If the DPR cannot develop and approve a formal charter, assign an individual responsible for managing a work group, and allocate hours to any individual hours assigned to a work group, it should eliminate the work group.

Several meetings of some of these work groups have been held, and participants have surfaced meaningful issues and agreed upon a number of recommendations to address these issues. The DPR should evaluate all of the issues and recommendations presented, prioritize the recommendations, develop a portfolio of improvement initiatives, assign responsibilities for implementing each initiative to a single person, and develop project plans to implement these initiatives.

P15. Performance measures

Develop performance measures for the PUR process. The objective is to provide a means to evaluate the process against a target or standard value. The definition of a business process, such as the PUR process, is a set of activities that begin and end with a customer. Performance measures can, and should, measure the entire process.

Three suggested measures statewide and by county are:

- Mean time for use to be reported in the PUR database, from date of pesticide use to date the use report is available to the public
- Mean time to return error reports to counties, from when DPR first receives the data files (in the mail room or e-mail attachment) to when DPR mails the error report or sends a responding e-mail with the attached error report
- Mean error rates, as measured by number of records with errors (after county submits corrections) divided by number of records received
- Mean time for county to submit data to DPR, as measured from date of pesticide use to date the DPR receives the county's report.

9. Process Improvement Recommendations *(continued)*

P16. Other improvements

- ❑ Eliminate use of DataFlex applications now used by coastal counties, replacing these in the short-term with a "standard" version of the DataFlex application. Doing so would reduce the number of non-standard DataFlex applications that the DPR must support.
- ❑ Develop a "roll-up" table for printing annual pesticide use reports. If the DPR allows counties to enter the code of the actual crop treated (refer to recommendation P1), cumulative reports of use prepared by the DPR will have many more crops identified, increasing the number of pages in these reports. A roll-up table of codes would reduce the number of pages in the report.
- ❑ Evaluate the integrity (I.e., quality, data substituted, and data excluded) of the U.C. Integrated Pest Management PUR database, and develop suggested language explaining limitations of the data. The objective is to provide end-users a better sense of the limitations of the data presented on the site.
- ❑ Post on DPR's website the cumulative number of pesticide use reports records received from each county for the most recent two calendar years, and refresh this listing weekly.
- ❑ Post on DPR's website error rates for each county.
- ❑ Post on DPR's website PUR data as it is received and validated, retain the current reporting deadline from the counties (April), eliminate the draft PUR report, and revise the timeline for releasing the final report and analysis so that it is issued earlier.
- ❑ Eliminate multi-page NCR forms, and replace with two-page forms.
- ❑ Eliminate the creation and reporting of "D" records (total number of applications on the monthly summary pesticide use report).
- ❑ Ensure that management responds to every formal request for a management decision. The objective is to respond to every formal staff requests for reviews or decisions. The DPR also should allow Branch Chiefs and Unit chiefs to make more final decisions, reducing the number of requests that must be pushed up through multiple layers of supervision.
- ❑ Ensure that all returned customer satisfaction surveys for PUR are returned to the PUR group.

EG1. Online use reporting

Provide Web-enabled access to electronic filing of use report data. The objectives are to reduce the time required to place use data into the statewide PUR database, reduce county and DPR resources required to ensure use data are correct and complete, increase the number of use reports captured in the statewide PUR database, allow counties and the DPR to capture the actual crop treated as recorded on the use reports, and eliminate hardcopy error reports.

The DPR partnership with nine counties, and the previous recommendation to develop the business case for the a statewide permitting and use reporting system (P12), could address this recommended e-government initiative, should the system be Web-enabled. Such a system should provide the following benefits:

- Provide immediate data access to all stakeholders
- More data standardization through use of uniform menus and coding
- Real-time error checking that will allow the end-user to investigate and correct the error at the time of data entry
- Reduce the time to publish validated data.

The DPR should include in this effort extensive outreach efforts, as well as direct involvement of technical work groups in defining system specifications and functional requirements. These efforts are necessary to ensure development of an efficient state/county pesticide regulatory program that meets the Administration's e-government goals and proposed legislative requirements for e-government projects.

Web-enabling use reporting should consider a key process improvement presented earlier (P1) to maximize the number of required validation checks of PUR data within the application that originally captures the data. This process improvement is vital to reducing turnaround times and increasing pesticide use data quality, whether the application is web-enabled or not.

EG2. Browser-based access to PUR database

Provide a means for end users to query the PUR database locally, using the same tools as will be provided with the Internet-based pesticide resource directory. The objectives are to provide quicker response to database queries, reduce end-user training requirements, and reduce the 250 inquiries received each year for DPR to develop more complex queries. The DPR now provides the PUR data on a CD ROM in a flat file format, but does not provide any application that would allow a requestor to query the data locally.

The PUR database contains over 26 million records, making it impractical to conduct many types of queries from a remote site (e.g., using a dial-up connection to the DPR's database server). Downloading results of queries using only a modem could take minutes, if not hours.

EG2. ***(continued)***

When the DPR resolves how PUR data will be accessible on the Internet, a similar interface (i.e., browser based) should be built and supplied on the CD ROM to allow an end-user to query the data locally (either on a PC or on a server accessible through a local area network). Based on stakeholder input, the DPR will need to determine the most frequent type of queries and possible reports of interest, and develop the local application to allow these most frequent queries and reports.

EG3. Internet access to product label database extracts

Provide a daily extract of the product label database on DPR's website for downloading by counties. The objective is to provide up-to-date product label, chemical codes, and commodity codes to validate PUR data entered by counties. This would include any new crop and rate of use tables created by the DPR for data validation on local applications, as suggested previously as a process improvement. The DPR should develop a policy to address adjuvants and surfactants on the Internet because these products often are a company trade secret.

EG4. Other improvements

- Provide Internet access to the PUR documentation that is suggested in a previous process improvement, taking advantage of point and click tools to drill down on subjects of interest to the end-user
- Provide a means for an end user to notify the DPR online about potential errors in PUR data. This interaction should include notifying the individual what change was made to the database. A process to support this interaction is suggested earlier as a process improvement
- Post on DPR's website information about each PUR work group, including charters, status of any formal project plans, and agendas and minutes for all work group meetings.

IT1. Application and database upgrades

Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to upgrade PUR applications and database from Oracle 7.3.4 to Oracle 8 and to make other identified improvements. The objective of the software upgrade is to maximize Cold Fusion functions, optimize queries, and speed up performance. The objective of the identified improvements is to enable current process improvement and e-government plans. The objective of the project plan is to reduce the risk of failing to implement the planned upgrades and modifications.

This includes: (1) development and deployment of the error correction application that will allow the DPR to key enter to the PUR database any county corrections submitted on hardcopy error reports, and (2) rewriting the loader program. Without these applications, the DPR cannot enter corrections into the database or publish an up-to-date PUR database.

IT2. Enhancements to County permitting and PUR application

Determine desired enhancements to a county-pilot for use reporting. The objectives are to provide stakeholders with essential tools to reduce the time required to get use data into the PUR database and prioritize enhancements to the pilot application that are needed by growers, PCOs, and counties.

The DPR should develop a forum (e.g., an information technology advisory group) to obtain and document required enhancements to the application being piloted by the County of Kings and eight other counties. This group should be given full authority to decide what modifications should be made and when.

IT3. Documentation of PUR applications and database

Prepare system and user documentation of all applications and the database. The objective is to allow efficient maintenance and use of DPR's loader and error correction applications.

The DPR should prepare some minimal level of the following:

- ❑ Operating procedures (instructions to initiate programs, obtain source documents, enter data, and distribute reports; description of error messages (DPR already has extensive documentation of error types); and defaults taken by system with instruction on how to change them)
- ❑ System documentation (data dictionary, system flow chart, application program documentation, and configuration diagram)
- ❑ Technical documentation (file structures and access methods, program flow charts, and source code).

IT4. Other improvements

- ❑ Provide a means to track ground water sites in order to be in compliance with new state law.
- ❑ Make improvements to loader program and assign staff to manage the program.

Mill Assessment Process

Process Description

- The DPR mails *Mill Assessment Quarterly Report* forms to registrants, dealers, and brokers two weeks before the end of each quarter. Completed forms are due within 30 days of the end of the quarter.

- Registrants, dealers, and brokers submit completed mill assessment forms to the DPR. Registrants, dealers, and brokers are assessed an amount on all registered pesticide products sold for use in California (called the "mill assessment"). The registrant, dealer, or broker first selling the product into, or within, California is assessed the mill. Products exempt from the mill assessment include those: (1) registered and labeled only for manufacturing or formulating into another registered product, (2) end use products used for non-pesticidal use (and the invoice states its specific intended use), and (3) registered and sold by governmental agencies. One mill is equivalent to $0.001 or 1/10th of one cent. The current assessment is 17.5 mill, or 1.75 cents. The rate has historically varied and is based on negotiations between DPR, the legislature, and the regulated community.

- The DPR follows up on the following problems associated with mill payments through telephone calls or problem letters:
  - Undelivered forms
  - Incomplete or incorrect data on forms
  - Non-returned forms
  - Reporting sales of unregistered products
  - No payment included
  - Penalties for late payments
  - Other errors.

- Audit staff audits registrants, dealers, and brokers to confirm accuracy of mill payments and to identify unregistered products.

Process Description *(continued)*

- The DPR generates a pounds sold report that summarizes statewide pounds of pesticides sold by active ingredient. Whenever three or fewer registrants report sales of a pesticide product containing the same active ingredient, by law the DPR must keep this information confidential. Thus, the DPR prepares two "pounds sold reports": one for internal use only that contains all pounds sold data, and one for external use that combines those pesticide products with three or fewer registrants into a single undisclosed category.

- The DPR distributes 6 mills of the 17.5 mills collected to CACs to fund their pesticide regulatory programs. The DPR uses specific criteria to allocate amounts among the CACs based upon each county's pest control activities, costs, workload, and performance.

2. Recent and Planned Improvement Initiatives

Recent Improvements

- In late 1998, the DPR enhanced the mill assessment database so staff no longer have to manually compare returned forms with mailings to identify non-returned forms. In 1999, the DPR generated the list of companies that did not return their *Mill Assessment Quarterly Report* forms (automatically from the mill assessment database) and followed up on all of them with at least one problem letter.

- In 2001, the DPR enhanced the capability to enter unregistered products into the mill assessment database. The DPR expects to generate from the mill assessment database a list of unregistered products reported.

- In 2001 the DPR improved the accuracy of reports by linking all data entry tables that included sales and product quantity data, streamlining the data entry process, and improving the accuracy of data entry by adding electronic data validation. These improvements are still pending testing.

Planned Improvements

- In November of 2000, a business process group, made up of internal DPR staff, developed a document titled *Mill Assessment Process* and identified recommendations to improve the mill assessment process and mill assessment database. These recommendations are specific improvements to five areas of the mill process and will require application development assistance from the ITB. No formal project plan exists.

- The audit group will post to the Intranet:
  - Audit form letters
  - Audit reports
  - Audit logs
  - Copies of letters to legal for unregistered products.

- The mill assessment group intends to provide the audit branch with read-only access to the mill assessment database. Audit staff currently must request the ITB to generate ad hoc reports of quarterly company sales data to use for audits.

3. Process Overview

Inputs

Registration

- ❑ Product label database
- ❑ Firm/registrant database

Licensing and certification

- ❑ List of current licensees and certificate holders

Enforcement

- ❑ Pesticide regulatory activities summary report (#5)

Registrant, dealer, or broker

- ❑ Completed Mill Assessment Quarterly Report Form and payment

Process

Enforcement

- ❑ Mail mill assessment form quarterly to registrants, dealers, and brokers

Accounting

- ❑ Open and log receipt of mail
- ❑ Log amounts, deposit checks, and report revenue
- ❑ Forward forms to Enforcement branch

Enforcement

- ❑ Identify to Accounting appropriate revenue receipt codes
- ❑ Check amounts submitted by registrants, dealers, and brokers
- ❑ Flag errors and contact registrants, dealers, and brokers by telephone
- ❑ Send letters to registrants, dealers, and brokers with reporting errors or failing to report (at 30, 60, and 90 day intervals)
- ❑ Key enter pesticide sales and mill assessments paid into mill assessment database
- ❑ Refer potential litigation to Legal (e.g., unregistered product reported)
- ❑ Prepare annual pounds sold report

Audit

- ❑ Audit selected companies to confirm reporting accuracy and payment compliance

Performance Measures

- ❑ None

Outputs

Enforcement

- ❑ Mill Assessment Quarterly Report Form (with a company's registered products identified)
- ❑ Problem letter
- ❑ Reference to DPR legal staff for potential litigation
- ❑ "Annual Pounds Sold Report"
- ❑ Report on unregistered products
- ❑ Updates to the following database:
  - ◆ Mill assessment

Accounting

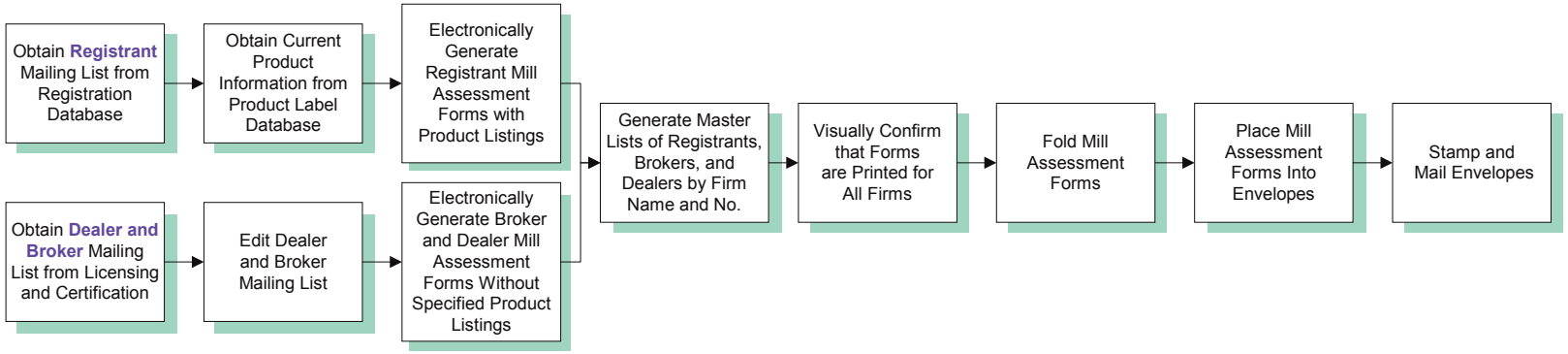
- ❑ Payments to CACs

Audit

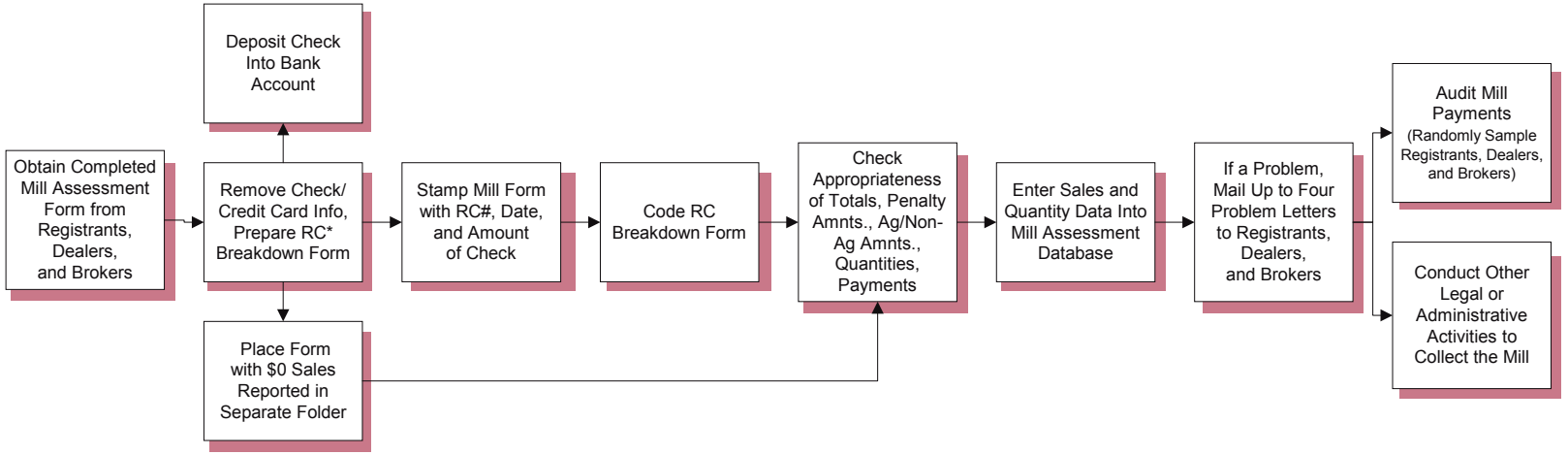
- ❑ Audit report

4. Process Workflow

Mill Assessment Form Mailing



Mill Assessment Form Processing



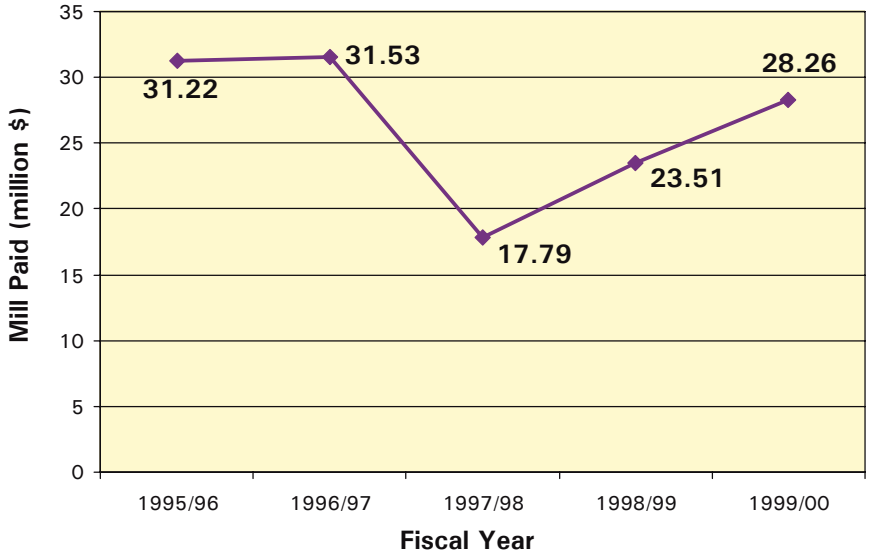
Primary database updated during process:

- Mill assessment

* RC = report of collections

Workload

Mill Paid by Registrants, Dealers, and Brokers
(FY 1995/96 through year-to-date FY 1999/00)



Mill Assessment Form Response Rate, Zero Sales, and Unregistered Products
(FY 1995/96 to year to date 1999/00)

Year [a]	Forms Mailed	Forms Returned	Forms Not Returned	Response Rate (% Returned)	Forms Returned with Zero Sales	% Returned with Zero Sales	Forms Returned Identifying Unregistered Product [c]	% Returned with Unregistered Product
1995/96	6,725	5,228	1,497	78%	1,697	32%	117	2%
1996/97	6,788	5,905	883	87%	2,306	39%	127	2%
1997/98	6,803	5,602	1,201	82%	1,194	21%	47	1%
1998/99	6,843	6,154	689	90%	2,008	33%	57	1%
1999/00 [b]	6,801	6,413	388	94%	2,773	43%	62	1%
Total d)	**33,960**	**29,302**	**4,658**	**86%**	**9,978**	**34%**	**410**	**1%**

Notes:

a) Data prior to 3rd quarter of 1999 may include inaccuracies.

b) Data are for first three quarters of 2000.

c) Data include registrants only and does not include dealers and brokers.

d) During this period, mill staff generated approximately 400 1st and approximately 25 2nd follow-up letters .

Workload

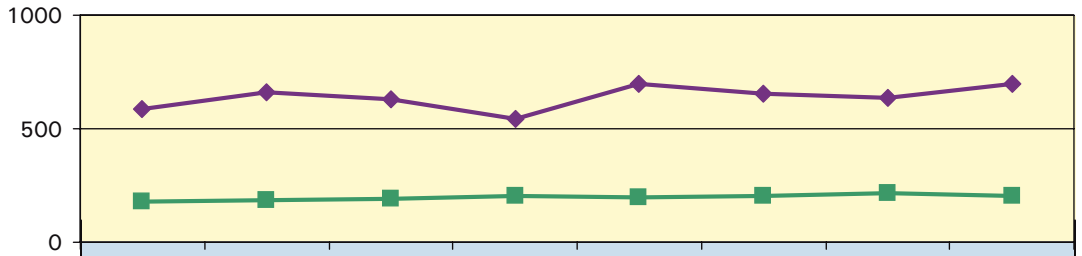
Non-Returned Letters Mailed, Final Notification Letters Mailed, Firms Referred to Legal, and Dollars Collected on Follow-Up Efforts

(2nd Quarter 1999 through 1st Quarter 2000)

Year/ Quarter	Non-Returned Form Letters Mailed by DPR	Number of Responses to Non-Returned Form Letter	Final Notification Letters Mailed	Firms Referred to Legal	Dollars Collected from Non-Returned Letter Follow Up
1999 2nd Qtr	136	107	29	15	$75,186
1999 3rd Qtr	79	45	34	17	42,542
1999 4th Qtr	102	58	44	21	28,539
2000 1st Qtr	91	41	–	–	6,630
Total	**408**	**251**	**107**	**53**	**$152,897**

Comparison of Pesticide Pounds Sold with Pesticide Pounds Used

(1992 to 1999)



	1992	1993	1994	1995	1996	1997	1998	1999
Pounds Sold (millions)	589.1	661.7	627.9	543.1	699.5	653.8	633.9	699.4
Pounds Used (millions)	180.5	188.0	191.4	205.1	197.8	204.8	214.3	202.6

Data only available on a calendar year basis.

Year

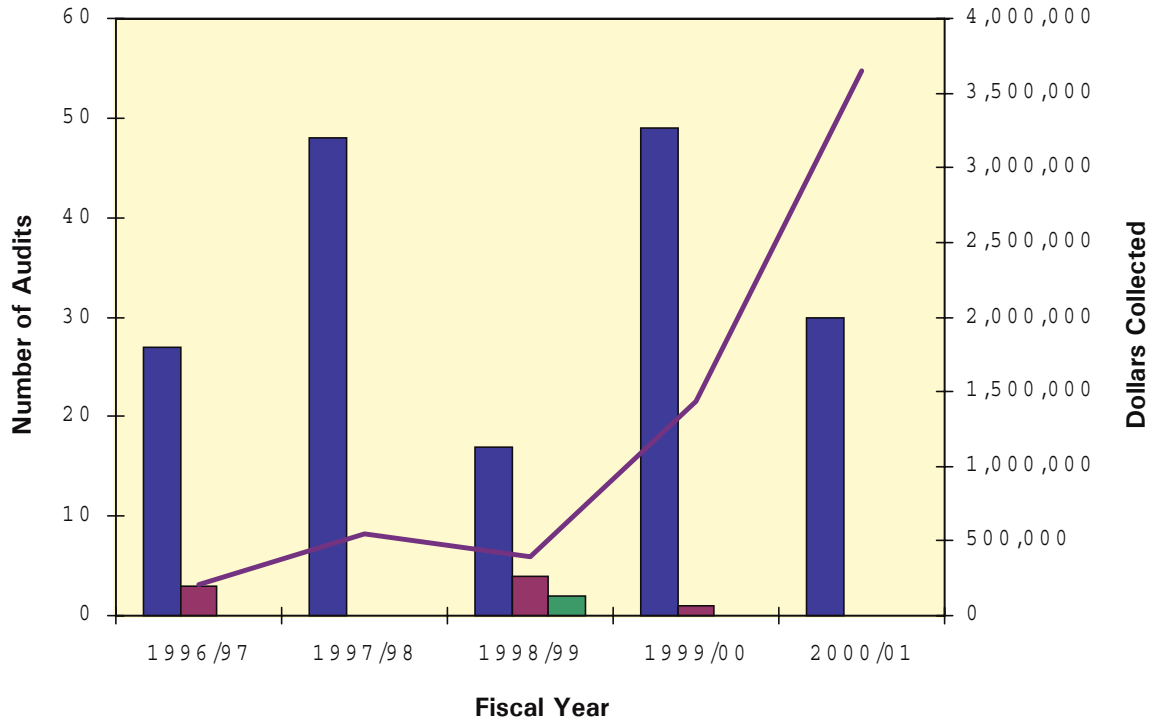
5. Metrics

Registrants, dealers, brokers

1,282	Firms with registered products (“registrants”)
450 to 500	Pest control dealers
15 to 25	Pest control brokers

Performance

Number of Mill Audits and Dollars Collected
(FY 1996/97 to year to date 2000/01)



6. Stakeholder Information and Service Needs

Information Needs

- Clear definition of mill assessment (including what sales the mill is due on)
- Timely delivery of mill assessment forms
- Confirmation of where and when mill assessment forms were mailed to a registrant, dealer, or broker
- Statutory and regulatory references to the mill assessment
- Pounds of pesticide sold per year reports and data
- Whether a product is registered in California (allowing legal sales)

Service Needs

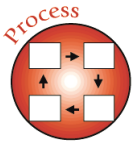
- Reduced time to complete the mill assessment process (efficiency)
- Timely and accurate payment of mill by DPR to CACs
- Removal of a company from mill assessment mailing list (e.g., when all the company's products are no longer registered in California)

7. Strengths

People

- Knowledgeable mill assessment and audit program management and staff.

Process



- Recent increase in number of follow-up letters sent to late filers.
- Confirmation that data entry by mill assessment staff are accurate.
- Recent increases in identifying and collecting unpaid assessments.
- Work groups created to: (1) develop improvements to mill assessment process, and (2) analyze recent decline in mill dollars collected.
- Comparisons of mill assessment database with pesticide use reporting that revealed products used but never reported sold.

Technology

- Direct linkage to the firm/registrant mailing database and product label database maintained by the Registration Branch.

8. Internet Access to Process

Information Now Available on the Internet:

- None

Services Now Available on the Internet:

- None

Links Provided to Other Sites:

- None

9. Process Improvement Recommendations

P1. Clarification of mill assessment form instructions

Provide additional instructions to the mill form. The objectives are to reduce staff time spent answering questions from registrants, dealers, and brokers on mill assessment forms and reduce staff time following-up on problems. Examples of clearer instructions on the form include the following:

- ❑ Specify that, for each product, the registrant must enter an amount in the dollars field (i.e., either a specific sales dollar amount or $0). Such a clarification for zero sales would require a regulatory change. Legal staff has indicated the change could require a legislative change to remove any doubt regarding the requirement
- ❑ Clarify that the registrant, dealer, and broker should not aggregate products into one line item but rather should report each product separately
- ❑ Specify that no other units of measure other than pounds or gallons are acceptable.

P2. Mill assessment software application and database user's guide

Develop a user's guide for how to use the mill assessment software application and database. The objectives are to reduce training needs, reduce ITB time spent on exceptions, and increase ITB time spent on mill database enhancements. The user's guide should include some description of the following:

- ❑ Instructions for turning the system on and getting the programs initiated (loaded)
- ❑ Instructions for obtaining source documents for data entry
- ❑ Instructions for entering data at the terminal, which includes a picture of each screen layout the user will encounter
- ❑ A description of error messages that can occur and the alternative methods for handling them
- ❑ A description of the defaults taken in the programs and the instructions for changing them
- ❑ Instructions for distributing the application's output, which includes sample pages for each type of report.

P3. Up-to-date licensing/ renewal database and clear policy on unregistered products

Ensure that the database of currently registered products is up-to-date and clarify the definition for when a registered product becomes unregistered for failure to renew. The objective is to reduce staff resources spent on mill collection efforts for products no longer registered or required to be registered (e.g., human use products).

9. Process Improvement Recommendations *(continued)*

P3. ***(continued)***

The DPR regularly mails mill assessment forms to companies for products that should no longer be registered because the company has not renewed the product's license. Currently, registrants must renew a product's license on or before January 1 each year and are assessed a late payment penalty after January 31. However, the DPR may not always remove the product from the database of registered products in a timely manner. Mill staff cannot distinguish between: (1) a company that does not wish to renew a registered product, and (2) a company that is late with its renewal.

Registrants also may pay the mill for products that are not licensed (e.g., the registrant is late in renewing the license). Mill staff are unclear whether to refer these cases to legal staff as a sale of an unregistered product.

The DPR should clarify to registrants that when a registered product is not renewed by an established date, that product is considered unregistered (and subject to civil penalties). The DPR should then remove products from the registration database in a timely fashion, if the company fails to renew by the established date.

P4. Incentive for mill payment in advance of due date

Consider providing incentives for submitting *Mill Assessment Quarterly Report* forms prior to a certain date to discourage concentration of returns mailed one to two weeks prior to the due date. The objectives are to reduce the time required to process mill assessment forms and free up staff to do other critical mill assessment functions.

P5. Aggressive pursuit of claims

Determine whether the DPR should more aggressively pursue complaints against those failing to comply with mill requirements. The objectives are to increase compliance and ensure all companies pay their fair share of the mill assessment. Not paying the mill provides a registrant, dealer, or broker an unfair economic advantage. Stakeholders have indicated that they want assurance that the DPR is collecting the mill from those required to pay the mill.

Steps to increase compliance could include:

- ❑ Introduce level of compliance as a performance measure for the mill assessment group Examples of performance measures include: (1) mill assessments paid divided by mill assessments owed,and (2) products paid divided by products registered (with an adjustment for products with zero sales). These are performance measures because they measure results of, or outcomes from, the mill assessment process.

9. Process Improvement Recommendations *(continued)*

P5. ***(continued)***

- ❑ Require mill staff to send at least three follow-up letters to registrants, dealers, and brokers on all unresolved mill payment problems, each with progressively more threatening language.
- ❑ Provide more follow up from DPR legal staff on mill assessment compliance issues. Examples of follow-up include resolving non-registered products issues and developing settlement agreements. In the past, the DPR had one legal staff dedicated to this follow up effort, with positive results on compliance.
- ❑ Obtain a legal opinion to clarify on what sales a mill is assessed. For example, although a registrant may not have renewed the license for a product, the registrant may continue to sell the product in California. If the registrant subsequently renews the license (albeit, late), the DPR should clarify its policy on whether product sales before the renewal are subject to the mill assessment.
- ❑ Revisit the DPR's position on whether it should use the administrative civil penalty process to more aggressively pursue complaints against those failing to properly pay the mill. The DPR has authority to pursue mill issues through the administrative civil penalty process, but has not often used this method. A more aggressive position would require formal due process. This could be expensive and time consuming because it would involve hiring a hearing officer or administrative law judge.

P6. Increase in late payment penalty

Modify the current 10 percent late penalty charged to registrants, dealers, and brokers so that the size of the penalty increases with time. The objectives are to increase the number of registrants, dealers, and brokers who pay the mill assessment on time and decrease the number of registrants, dealers, and brokers who wait to settle a mill assessment problem. Mill staff has indicated some registrants, dealers, and brokers either may not pay the mill on time or may elect not to settle a mill payment problem in a timely manner because the penalty is fixed at 10 percent of unpaid mill assessments.

Creating a graduated scale of increasing percentage over time would reduce the likelihood that registrants, dealers, and brokers wait to pay the mill or settle a mill problem. The DPR should cap this penalty structure after some period of time to avoid the penalty increasing beyond a level where the penalty would not fit the severity of the late payment problem. Because the penalty structure is based on the percent of pesticide sales, the DPR also may wish to incorporate a second type of fixed dollar penalty for non-returned forms, as this is a primary source of mill staff's follow-up effort.

A change to the penalty structure would require a change in legislation and regulation.

9. Process Improvement Recommendations *(continued)*

P7. Toll-free number to report compliance issues

Develop a process and toll-free number that allows an individual to contact the DPR with anonymous tips on registrants, dealers, or brokers who may not be paying the mill. The objectives are to increase compliance and ensure all companies pay their fair share of the mill assessment. Not paying the mill provides a registrant, dealer, or broker an unfair economic advantage. Registrants, dealers, and brokers, whose competitors are not paying the mill, are highly motivated to inform the DPR. A toll free number makes it easy for an individual to report such instances. The DPR could use this information to generate follow-up letters and to prioritize audits.

P8. Performance measures

Establish and publish the DPR's performance measures for the mill assessment process. . The objective is to provide a means to evaluate the process against a target or standard value. The definition of a business process, such as the mill assessment process, is a set of activities that begin and end with a customer. Performance measures can, and should, measure the entire process.

The DPR should establish a goal to continuously improve efforts to encourage compliance, and measure the level of compliance. The DPR should first determine the current level of compliance for a selected group of registrants, dealers, and brokers, establish target levels for improvement, and then achieve the targeted levels for the regulated community.

Two possible performance measures are:

- ❑ Mill assessments paid divided by mill assessments owed (refer to recommendation P5)
- ❑ Products paid divided by products registered (with an adjustment for products with zero sales).

P9. Pursuit of non compliant companies

Formalize an on-going effort to utilize mill assessment and pesticide use information to determine potential mill assessments that go unpaid. The objective is to increase compliance. The DPR should identify registrants, dealers, and brokers not complying with mill assessment requirements for follow-up and potential audit. The DPR recently demonstrated the value of formalizing these comparisons to ensure all participants pay a fair share of mill assessment.

The DPR should develop statistical methods to use the pesticide sales data and mill assessment data to determine compliance with mill requirements and to develop an estimate of the percent of companies that do not pay. The DPR can use results to follow-up with possible reminders, training, and enforcement. Developing this estimate will require a larger study than just comparing the mill assessment data with use reports, and will require significant corrections be made to both the sales database and the PUR database.

9. Process Improvement Recommendations *(continued)*

P9. ***(continued)***

A similar analysis should be performed each year (using four years of historical data) to reveal those products with reported use far in excess of reported sales. Mill staff should use these data to submit follow-up letters. Audit should consider this analysis when preparing its audit sample design.

P10. Audit sample design

Develop and document a methodology for sampling companies to audit for mill assessment payments. The objective is for DPR to make statistically valid inferences of audit results to the registrant, dealer, and broker population from the sample of audits conducted. The sample design should:

- ❑ Stratify the population by type (e.g., registrants, dealers, and brokers)
- ❑ Stratify the population by size
- ❑ Define the number of items to be sampled from each strata
- ❑ Define the sampling approach to randomly select within each strata (e.g., select every m^{th} item, starting with the n^{th} item in the strata)
- ❑ Define the confidence level of the sample results.

The sample design can be used in addition to other methods that audit staff currently use (e.g., auditing companies with $0 sales or those companies that the DPR has knowledge from another source may not be paying the mill).

Because DPR cannot audit all companies, it should establish a fair and equitable approach to assuring that all registrants, dealers, and brokers are equally subject to an audit. The DPR should review audit methods used by other government entities (the EDD and the FTB) to assess how they make inferences to the population based on their samples.

P11. Reconciliation of mill assessment database with amounts deposited

Create a process to reconcile mill amounts recorded by accounting with mill amounts entered in the mill assessment database. The objectives are to increase data accuracy and provide an explanation for differences between accounting records and the mill assessment database. The DPR could use the report of collections (RC) figure as the basis for reconciling amounts deposited with the mill assessment database. This reconciliation should delineate dollars received through regular mill collections, audits, and penalties. Audit staff should review this reconciliation as part of their internal audit.

9. Process Improvement Recommendations *(continued)*

P11. ***(continued)***

This reconciliation should identify all differences between accounting amounts and amounts entered by mill staff into the mill assessment database. The DPR should quantify the amount of any differences for the year. The DPR should test to assure that all amounts deposited by accounting are captured in the mill assessment database. The DPR should test mill assessment reports to confirm that they reflect all transactions entered in the mill assessment database. If applicable, the DPR should identify transaction types not included in mill assessment reports. Based on evaluation results, the DPR should modify the mill assessment report logic and/or the mill assessment database design so the DPR can provide complete and accurate mill assessment reports.

P12. Biannual mill assessment

Collect the mill assessment twice per year rather than quarterly. The objectives are to reduce reporting requirements of registrants, dealers, and brokers, reduce staff resources spent on administrative functions, and shift mill resources from mailing and data entry activities to more valuable follow-up activities. More valuable activities include working with stakeholders to make the process simpler, provide information to increase compliance, and consistently following up on all non-payment issues. The DPR's staff could increase the number of problem letters prepared (when the problem requires one) from an average of one to up to three per registrant, dealer, and broker.

The DPR would need to update the mill projection model to reflect a twice per year rather than four times per year mill collection. This improvement would require a change in legislation and regulation.

P13. Organization of mill assessment staff

Reorganize mill assessment staff. The objectives are to provide more clear management and reporting relationships and increase staff classifications to align them with position requirements. These objectives can be met by:

- ❑ Identifying an existing branch chief to take ownership of the mill
- ❑ Establishing a full-time mill lead position
- ❑ Upgrading the one existing office assistant and one existing office technician both to program technicians so their position classifications are reflective of actual tasks performed
- ❑ Dedicating an ITB resource to the mill process for at least two years.

The DPR should move all mill assessment responsibilities from enforcement to administration. The DPR should evaluate the advantages and disadvantages of placing mill staff either within the audit branch or the fiscal services branch.

9. Process Improvement Recommendations *(continued)*

P14. Required follow up by staff on mill payment problems

Follow-up with three progressively more stringent letters to all registrants, dealers, and brokers with a mill payment compliance problem. The objective is to increase compliance. The DPR should dedicate resources so that staff can generate and mail these three problem letters for all mill payment problems.

P15. Mill assessment status report

Prepare a mill assessment status report on a biannual basis to keep the DPR aware of sales data, audit findings, and other management information. The objective is to increase DPR staff awareness of the mill process. The DPR should continuously communicate the overall importance of the mill to the DPR and the relationship of the mill process to other business processes. The DPR should provide a set of metrics in the status report including:

- ❑ Mill amounts received
- ❑ Pounds sold
- ❑ Number of mill audits
- ❑ Dollars collected from mill audits
- ❑ Unregistered products forwarded to legal office by mill and audit staff
- ❑ Percent of DPR funding from the mill assessment.

The DPR should provide Intranet access to this mill status report.

P16. Other improvements

- ❑ Charter a work group with licensing and certification staff and audit staff to determine an approach to identify additional dealers and brokers who may be subject to the mill assessment (e.g., CACs finding unlicensed brokers).
- ❑ Eliminate mill staff's binder of current registration licenses and rely on the licensing/renewal database to confirm current registration. This will require that registration specialists ensure this database is made current every day.
- ❑ Review product label database to identify and correct products incorrectly designated as "manufacturing use only." These products are exempt from the mill and the DPR is not requesting sales data and mill payments on these products. Products may be mislabeled as "manufacturing use only" and should be assessed the mill.

EG1. Electronic submission of *Mill Assessment Quarterly Report* form

Allow registrants, dealers, and brokers to submit a complete *Mill Assessment Quarterly Report* form online. The objective is to decrease the time required to submit a *Mill Assessment Quarterly Report* form and payment. Another goal is to make electronic filing, payment, and communication so simple, inexpensive, and trusted that the regulated community will prefer these to calling and mailing.

The user would log in with an identification number and password and would only have access to their own registered product information. For registrants, the site would list registered products and pre-specify gallons or pounds for each product. For dealers and brokers, the site would allow users to enter product sales information and units.

- ❑ Potential capabilities include the following:
- ❑ Automatically generate the mill forms and post them to a web-accessible site
- ❑ Ensure required fields are completed
- ❑ Provide methods for checking errors prior to submitting form
- ❑ Automatically compute required payments and total payment
- ❑ Allow electronic payment
- ❑ Confirm electronically (receipt).

The DPR could automatically populate existing mill assessment databases with data submitted by the registrant, dealer, or broker. The DPR then could automatically generate various follow-up letters. This new system would require a redesign of the current application and database to allow for the queries and updates.

EG2. Online mill assessment guidance and information

Provide Internet access to materials that will help registrants, dealers, and brokers through all aspects of completing the *Mill Assessment Quarterly Report* form. The objective is to reduce the number of forms returned to registrants, dealers, and brokers.

The DPR could provide the following on its website:

- ❑ Definition of mill
- ❑ On what sales the mill is assessed
- ❑ Mill rate
- ❑ Reason for payment
- ❑ Total mill amounts collected
- ❑ Audit process
- ❑ Contact numbers.

EG3. Answers to frequently asked questions

Provide online access to answers that stakeholders often ask. The objectives are to reduce the number of forms returned to registrants, dealers, and brokers because of deficiencies, reduce telephone calls to mill staff, and reduce staff time responding to requests. The DPR should reference the location of the FAQs on the mill assessment form.

The DPR should provide answers to the following frequently asked questions:

- ❑ What is the mill assessment?
- ❑ Who is required to pay the mill?
- ❑ Why must more than one registrant in some cases pay the mill on the same product?
- ❑ How do I complete the mill form?
- ❑ Which products must the registrant, dealer, or broker pay the mill on?
- ❑ How are Internet sales treated?
- ❑ How is "ag use only" defined?

EG4. Internet access to pounds sold data

Provide Internet access and query capabilities to pounds sold data. The objectives are to provide end-users valuable historical data that can satisfy public records act requests and allow end-users to conduct research online. The DPR should provide query and report capabilities to the pounds sold data extracted from the mill assessment database. In making the determination whether to provide access, the DPR should weigh the additional service provided to the stakeholder with the potential increase in questions of mill staff. The DPR also must protect confidentiality of product data for products with three or fewer registrants, dealers, or brokers.

IT1. Improvement of mill assessment database integrity

Develop and implement a project plan (tasks, resources, schedule, and responsibilities) to improve the mill assessment database. The objective of the project plan is to reduce the risk of failing to implement planned upgrades and modifications.* The objectives of the improvements are to reduce errors with the mill assessment database and reduce the time from generating a *Mill Assessment Quarterly Report* form and completing data entry of mill assessment data.

Key improvements include:

- *Printing and mailing forms* - eliminate manual verifications, revise total boxes, and provide links directly to the mailing lists in the licensing and certification core database and the registration firm/registrant database
- *Data entry* - make general modifications to maximize the number of data validations, eliminate visual/manual validation, and provide easier data entry capabilities
- *Problem follow-up* - generate weekly problem letters automatically from database, based on type of problem
- *Reports and queries* - improve report accuracy, eliminate double entry of data, and provide additional data in standard reports.

* Database modifications are documented in a recent November 2000 DPR report titled: *Mill Assessment Process*.

IT2. Master database for registrant, dealer, and broker mailing addresses

Use one database of current registrants and one database of current dealers and brokers for mailing addresses. The objectives are to reduce the number of mill assessment forms returned due to an incorrect address, reduce the time required to obtain mill payments, and eliminate duplicative data.

The DPR should allow registration specialists only to update the current registrant mailing addresses, and require them to ensure these addresses are current (i.e., change of address requests are processed within one day). Licensing and certification staff should update and maintain the current dealer and broker mailing addresses and should be required to ensure these addresses are current (i.e., change of address requests are processed within one day). The DPR should identify one person within registration and one within licensing and certification to ensure that changes of addresses are made immediately. This would require mill staff to have shared access to the registrant/firm database and the licensing and certification database, perhaps via the Intranet.

IT2. ***(continued)***

These databases should contain one contact and one address to which all correspondence is mailed. The registrant, dealer, and broker should be responsible for internally routing the mill form to the appropriate party within the company for payment.

IT2. Other improvements

- ❑ Generate problem letters automatically from the mill assessment application and database. The objective is to reduce the time and costs to generate problem letters.
- ❑ Provide read-only access and query capability to mill assessment database for audits staff and Worker Health and Safety Branch staff.

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